

**INSTRUCTIONS FOR:  
Notice of Intent (NOI) and Nutrient Management Plan (NMP)  
Concentrated Animal Feeding Operation General Permit (CAFO GP)  
MTG010000**

The NOI-NMP-CAFO form must be completed by the owner/operator of a CAFO activity eligible for coverage under DEQ's Concentrated Animal Feeding Operation (CAFO) General Permit. Corresponding documents and related forms are available on the DEQ website at: <https://deq.mt.gov/water/assistance> or from DEQ by calling (406) 444-5546. **Do not use this form to transfer permit coverage to a new owner or operator. For a permit transfer you must use Form PTN.**

You must provide a complete NOI-NMP-CAFO package before DEQ can authorize your proposed activity. Please type or print legibly; applications that are not legible or are not complete will be returned. Responses must be self-explanatory and must not refer exclusively to attached maps, plans, or documents. You must maintain a copy of the General Permit and completed NOI-NMP-CAFO form application package for your records. The completed NOI-NMP-CAFO form requires a wet-ink signature and must be mailed to the following address:

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

Fees may be submitted with the application to the above address or submitted online as follows:

- Online Submission: Fees, Applications, and Compliance Tracking System (FACTS) at <http://deq.mt.gov/Public/FACTS>

Note that the NOI-NMP-CAFO application package is comprised of the NOI (Sections 1-5) and the NMP (Sections 6-10).

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**SPECIFIC ITEM INSTRUCTIONS**

**CAFO Status and Fee**

Permit Authorization Number. Provide your MPDES-assigned permit authorization number.

- Leave blank if this is your first NOI-NMP-CAFO submission under the CAFO General Permit. DEQ will assign you a permit coverage number.
- If you were covered under the 2018-General Permit, provide your MPDES permit number. The authorization number begins with MTG010.

Select Appropriate Fee:

- New Application: Check this box if this is the first NOI-CAFO submission for this operation under the CAFO General Permit.
- Renewal Application: Check this box if your operation is currently covered under the 2018-CAFO General Permit.
- Permit Modification: Check this box if there is a change in the operation or site information. (This does not apply to permit transfers.)

## Section 1 – Facility/Site Information

- Facility Name: Identify the name of the facility or activity at this CAFO.
- Location: This describes the specific area/location of the CAFO. The operation site location description may be a physical address or description of how the site may be accessed. PO Boxes are not acceptable. If the street address is not available, include the nearest intersection or other identifying information.
- Nearest City or Town, Zip Code, County: This is the city or town located closest to the CAFO.
- Facility Latitude, Longitude: Latitude and longitude coordinates must be accurate. DEQ prefers the location be specified in decimal degrees, accurate to the fourth decimal place. If the preferred decimal degrees are not used, then the coordinates must be provided in degrees, minutes, and seconds, accurate to the nearest second. Geographic information may be obtained at <http://nris.msl.mt.gov/>.
- Status of Applicant: Check the box that best describes the status of your operation.
- Located Within Indian Country: Indicate if the operation will occur in Tribal lands. This CAFO General Permit applies to all areas of the State of Montana, except for Indian Reservations, which are permitted by EPA.

## Section 2 – Representatives

### 2.1 Applicant (Owner/Operator)

The permit will be issued to the entity identified in this section. The owner/operator assumes all liability for discharges from the site and compliance with the terms and conditions of the CAFO General Permit and applicable regulations. If the owner/operator is an entity other than an individual or government entity, the entity must be registered with the Montana Secretary of State's office.

- Owner/Operator Formal Name: Give the name, as it is legally referred to, of the business, public organization, or other entity that owns, operates, controls, or supervises the site or activity. Provide the mailing address, city, and state zip code for this person.
- Signatory/Responsible Official (Name, Title): The signatory/responsible official must meet certification requirements in the Certification section of the NOI-NMP:
  - For a corporation, by a responsible corporate officer. A responsible corporate officer means:
    - a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation; or
    - the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25 million (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
  - For a partnership or sole proprietorship, by a general partner of the proprietor, respectively; or
  - For a municipality, state, federal, or other public facility, by either a principal executive officer or ranking elected official.

### 2.2 Authorized Representative

Select whether an authorized representative is designated for this operation. If not, skip to Section 3.

Authorized Representative: All reports may be signed by a duly authorized representative. A person is a duly authorized representative only if:

- The authorization is made in writing by the signatory/responsible official;
- The authorization specifies 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 any individual occupying a named position); and

- The written authorization is submitted to DEQ.

Any signatory or authorized representative must make the certification in the Certification portion of the NOI-NMP.

The signatory/responsible official can duly authorize the person identified as an authorized representative or another individual or position name. If the signatory/responsible official does not duly authorize anyone, all correspondence must come from him/her until a written designation is submitted to DEQ. In the future, if the authorization made in this NOI is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new written delegation of authorization, including a written letter satisfying the requirements above, must be submitted to DEQ prior to or together with any reports, information, or applications to be signed by an authorized representative.

### **Section 3. Business Description**

#### **3.1 SIC Codes and NAICS Codes**

In descending order of significance, list the Standard Industrial Classification (SIC) codes and North American Industry Classification System (NAICS) codes that best describe your facility in terms of the principal products or services you produce or provide. At least one SIC code and one NAICS code must be provided.

SIC Codes and conversions from the newer North American Industry Classification System can be found at <http://www.osha.gov/pls/imis/sicsearch.html> and <https://www.census.gov/naics/>.

#### **3.2 Facility or Operation Description**

Provide a brief description of the nature of the facility.

#### **3.3 Existing or Pending Permits, Certification, or Approvals**

List any environmental permits obtained by the CAFO.

### **Section 4 – Outfalls**

#### **4.1 Receiving Water**

Identify each receiving water:

- Outfall Number: An outfall is a discrete channel, conveyance, structure, or flow path from which discharge leaves the facility, before entering the receiving water and after all treatment. For renewals, use the outfall number(s) specified in the current authorization. For new projects list all outfalls starting with 001. Attach additional sheets if necessary for more outfalls.
- Latitude and Longitude: Provide accurate coordinates for each outfall. DEQ prefers coordinates be reported in decimal degrees, accurate to the fourth decimal place. Latitude and longitude can be obtained at [https://mslservices.mt.gov/Geographic\\_Information/Applications/DigitalAtlas/](https://mslservices.mt.gov/Geographic_Information/Applications/DigitalAtlas/).
- Receiving Water Name: If the receiving water/drainage is unnamed, indicate the closest named drainage it flows into (for example, “unnamed tributary to Clear Creek”). If the discharge reports to a municipal storm sewer, please indicate so.

### **Section 5 – Characteristics**

#### **5.1 Impaired Waters 303(d)**

Identify whether the receiving water is impaired for nutrients. Check the Clean Water Act Information Center database at <https://deq.mt.gov/water/resources> to determine if the receiving water is impaired for nutrients (total nitrogen and/or total phosphorus).

#### **5.2 Animal Confinement**

Report the maximum number of each type of animal confined at any one time in open confinement

and/or housed under a roof.

### **5.3 Rain Gage Location**

Identify the nearest gage station or an onsite rain gage.

### **5.4 Containment Structures:**

- Answer whether the containment structures were built after February 2006. If they were, skip the following 3 questions and continue to the table below. If the containment structures were built prior to February 2006, complete all questions within Section 5.4.
- In the provided table, identify the type of containment/storage, the total capacity with units, and the number of days of available storage for each.
- The term “*storage pond*,” includes, but is not limited to ponds, aerobic lagoons, evaporation ponds, manure holding cells, collection basins, settling basins, bermed or diked areas used for impounding waste, and temporary or seasonal waste holding ponds.

### **5.5 Sage Grouse Habitat**

Visit <https://sagegrouse.mt.gov/> to determine if the proposed operation is located in designated sage grouse core, general, or connectivity habitat. If it is, then you will need to submit an application to the Montana Sage Grouse Habitat Conservation Program and obtain a consultation letter from the Program. Include the consultation letter with your NOI-NMP-CAFO submission. For more information, call (406) 444-1467 or (406) 444-2613.

### **5.6 New Source**

This section must be completed if your CAFO facility is not yet permitted or does not yet exist and will be constructed and initiating operation.

- Contact the Montana Natural Heritage Program (MNHP), <http://mtnhp.org/> and request a project review for the proposed operation. Attach the MNHP analysis to the NOI Form.
- Contact the Montana State Historic Preservation Office (SHPO), <http://mhs.mt.gov/shpo/> and request a project review for the proposed operation. Attach the SHPO analysis to the NOI Form.

You may need the following items in order to complete the NMP portion of the application:

- NRCS No. 80.1 Nutrient Management, Agronomy Technical Note MT-11;
- Montana State University Extension Service Publication 161, Fertilizer Guidelines for Montana Crops;
- NRCS Sampling Soils for Nutrient Management – Manure Resource, MT;
- Montana State University Mont Guide, Interpretation of Soil Test Reports for Agriculture, MT200702AG;
- NRCS Conservation Practice Standard, Code 590 and Waste Utilization, Code 633.

Please type or print legibly; forms that are not legible will be considered incomplete.

## **Section 6 – NMP Minimum Elements**

### **Facility Photos and Maps:**

Attach photos and maps (aerial and topographic) that depict all the items listed in the application. Once you have confirmed all the required elements have been included in the maps/photos, check the box to confirm you have done so.

- The “production area” is that part of an Animal Feeding Operation (AFO) that includes the animal confinement area, the manure storage area, the raw materials storage area, and the waste containment areas. This includes is any egg washing or egg processing facility, and any area used in storage, handling, treatment, or disposal of mortalities.
- 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 storage, 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 not limited to settling basins, and areas within berms and diversion which separate uncontaminated storm water.

Application forms submitted with incomplete or illegible maps will be considered incomplete and returned with instructions to provide an appropriate map.

### **6.1 Ensure Adequate Storage Capacity**

#### ***Complete the table:***

- Identify each type of animal confined at this facility. “Type” can include animals of a given species, animals of a given weight class (e.g., piglets, sows), or animals housed for a specific purpose. The Animal types should be identical to what is reported in Section 5.2 of the application form.
- For each animal type, describe where manure, litter, or process wastewater is/will be stored.
- Enter the maximum number of that type of animal the facility can hold.
- Enter the number of days on site per year. This number represents the number of days at least one animal of a given type is held in confinement during any 12-month period.
- Enter the annual manure litter and process wastewater production. This refers to the volume of manure, litter, or process wastewater (from a given animal type) that is stored, land applied, or transferred to another person during any given 12-month period.

**Methods for estimating animal manure, litter, and process wastewater production:** Describe the methods used for estimating animal manure, litter, and process wastewater production: Include all formulas, factors, references to tables, and other resources used to calculate manure, litter, and wastewater production. Be sure to account for soiled bedding materials.

**Manure handling:** Identify where the manure, litter and process wastewater is handled and stored at the facility. Identify the frequency that manure, litter or wastewater is removed from the confinement area. If the manure, litter, or process wastewater is temporarily stored outside of the production area, describe how and where it is temporarily stored. If dry manure or litter is stored on an impervious surface like concrete or asphalt, describe the surface on which dry manure or litter is stored.

#### **Waste Control Structures.**

- “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.
- “Critical Storage period” means the minimum design volume for liquid manure storage structures is based on the expected length of time between emptying events that result in maximum production of process wastewater, including runoff from the production area. The critical storage period is considered to be the 180 days starting November 1<sup>st</sup> to April 30.
- List the area within the clean water diversions. This is the area that is inside the BMPs used for clean water diversions. This area is used to calculate the volume required to hold the 24hr.-25yr. storm event and the volume of your critical storage period. Check all the surface types within the clean water diversion area in acre or ft<sup>2</sup>.

Complete the table: List all waste control facilities for the production area. These may include, but are not limited to, manure lagoons, manure ponds, evaporation ponds, wastewater retention ponds, contaminated runoff retention ponds, settling basins, underground storage tanks, underfloor pits, manure solids stacking pads, vegetative treatment strips, composting facilities, and dry stack facilities. Berms, dikes, concrete curbs, ditches, and waste transfer pipelines are also waste control structures and must be listed, though some of the requested measurements may not apply.

### **6.2 Mortality Management**

Check the box(es) describing how the facility manages their dead loss. If dead loss is disposed of within the production area, describe the location where dead loss is disposed of. The dead loss disposal area may be located offsite.

### **6.3 Clean Water Diversion Practices**

Check all boxes that describe methods the facility employs to divert clean water from the production area. Ensure all methods are included on the map required in Section 6., Facility Maps and Photos.

### **6.4 Prohibiting Animals from Contact with State Waters**

Indicate what BMPs are used to prevent animals from coming into direct contact with waterbodies.

## **6.5 Chemicals and Contaminants**

List all major chemicals or other contaminants handled onsite as part of the CAFO operation, including, but not limited to: pesticides, herbicides, animal dips, disinfectants, etc. Specify the method of disposal for each chemical/contaminant.

## **6.6 Conservation Practices**

Check all BMPs that apply. These BMPs are used to control runoff of pollutants from the production area. Please note that “production area” means that part of a CAFO 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, 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 material 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 in 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.

**6.7 Sampling and Analysis Procedures for Manure, Litter Process Wastewater, and Soil**  
Sampling and Analysis can be conducted according to Part II.D of the CAFO General Permit. If sampling is conducted in a different manner, explain how sampling is conducted.

## **Section 7 – Land Application**

If all manure produced at your facility will be transferred to other persons for use in areas beyond your operational control, provide an explanation of how animal waste will be managed, then skip to Section 10. You do not need to fill out the rest of Section 7 or Sections 8 and 9.

If the manure produced at the facility is land applied to land that is owned, rented, or leased by the owner/operator of the facility, continue to Section 7.1.

### **7.1 Land Application Photos and Maps**

Attach photos and maps (aerial and topographic) that depict all the items listed in the application. Once you have confirmed all the required elements have been included in the maps/photos, check the box to confirm you have done so.

### **7.2 Protocols to Land Apply Manure, Litter, or Process Wastewater**

Check all BMPs that apply. These BMPs are used to control runoff of pollutants from the production area. Describe in detail all temporary, permanent, and structural BMPs which will be used to control runoff of pollutants from the facility’s land application area. Indicate the location of these practices on the field maps required above.

If not already in use, include a schedule for implementation of each of these measures. Attached details and specifications may be used to supplement this description. Examples of BMP measures include but are not limited to: maintaining setbacks from surface waters for manure applications; managing irrigation practices to prevent ponding of wastewater on land application sites; and consulting with the Department prior to applying any liquid waste to frozen or snow-covered ground.

### **7.3 Soil Phosphorus Sampling and Analysis**

Representative **soil** (composite) samples from the top 6 inches layer of soil for each field where manure will be applied must be analyzed for phosphorus content at least once every three years. Analyses will be conducted by a qualified laboratory, using the Olsen P test. Results will be reported in parts per million (ppm) and will be used in determining application rates for manure, litter, and process wastewater.

### **7.4 Soil Nitrogen Sampling and Analysis**

Representative composite soil samples for total nitrogen and nitrate must be collected for each field where manure will be applied. Composite samples for total nitrogen must be collected from a soil depth of 0 to 6 inches and must be analyzed at least once every 3 years. Composite samples for nitrate must be collected from a soil depth of 6 to 24 inches and must be analyzed at least once every 3 years. All samples must be analyzed according to method code 4H2a1-3 in NRCS Soil Survey Laboratory Methods Manual, Soil Survey Investigation Report No. 42. Results must be reported as mg/kg total nitrogen and pounds per acre will be used in determining application rates for manure, litter, and process wastewater.

## **Section 8 – Linear and Narrative Rate Approaches**

The applicant has two ways to report how manure or process wastewater application: Linear Approach or Narrative Rate Approach.

If reporting via the Linear Approach, complete Section 8.1 of the application, then continue to Section 9.

If reporting via the Narrative Rate Approach, complete Section 8.2 of the application, then continue to Section 9.

### **8.1 Linear Approach**

To complete the Nutrient Budget Worksheet, follow the steps below:

Enter the field identification number used on the photos/maps above, the year in which the crop will be grown, the crop that will be grown, and the number of acres for that field.

Enter the expected crop yield from the Fertilizer Guidelines for Montana Crops Publication EB 161 based on expected nitrogen supplied from all sources.

Enter the results of the phosphorus field-specific assessment.

Enter Method of land application.

Enter when application will occur.

Line 1: Enter in the planned crop nutrient needs in pounds per acre from Fertilizer Guidelines for Montana Crops Publication EB 161.

Line 2: If in the previous year a legume crop was grown, enter the max values given in Appendix D of the General Permit. Otherwise, enter the credits from soil analysis results in pounds per acre.

Line 3: Enter nutrient credits from second year manure applications pounds per acre if applicable. See Appendix D of the General Permit for mineralization rate. Multiply the previous year's nitrogen application rate from manure, litter, or process wastewater by the second-year mineralization rate and enter it here.



Line 4: Enter nutrients supplied by commercial fertilizer in pounds per acre. This can be starter or other fertilizer that is applied prior to manure application.

Line 5: Enter nutrients supplied by any irrigation water in pounds per acre from water test.

Line 6: Subtract lines 2 through 5 from line 1 and enter in the space provided

Line 7: Enter the nitrogen or phosphorus from sample taken of manure or process wastewater within the last year.

Line 8: Enter the Nitrogen Availability by Application Method. Enter 1 for phosphorus.

Line 9: Multiply line 7 by line 8 and enter it here.

Line 10: Enter value from line 6 here.

Line 11: Enter value from line 9 here.

Line 12: Divide line 10 by line 11 and enter it here.

## **8.2 Narrative Rate Approach**

Answer the questions provided in this section. Attach additional sheets as necessary.

### **Section 9 – NMP Phosphorus**

**Phosphorus Risk Assessment:** An assessment shall be conducted for each field, under the control of the operator, to which manure, litter or process wastewater will or may be applied. If a new field is added in the future, then the permittee must submit a revised (modified) NMP. The permittee has the option of using Method A or Method B to complete the assessment, unless the receiving water is impaired for nutrients, in which case you must use Method B for phosphorus risk assessment. Copies of all tables and calculations used to complete the assessments, as well as the results of the assessments, shall be submitted to the Department and copies shall be maintained onsite at the facility and available for Departmental review. The results of the assessments shall be used to determine the appropriate basis for land application of wastes from the facility.

Indicate whether Method A or Method B will be used to determine phosphorus application and provide the information required for the selected method.

### **Section 10 – NMP Guidance**

**Land Application Equipment Calibration:** Describe the type of equipment used to land apply wastes and the calibration procedures. Land application equipment calibration is essential to ensure that nutrients are being applied at agronomic rates. Provide specific information on how equipment will be calibrated. The CAFO shall maintain the supporting documentation on site and shall make this information available to DEQ upon request.

**Implementation, Operation, Maintenance and Recordkeeping:** Indicate protocols kept for implementation of the Nutrient Management Plan.

### **NOI-NMP Certification**

Certification must be completed by the signatory (owner/operator) responsible for the authorization as identified in Section 2.1 of these Instructions and described in ARM 17.30.1323.

This is certification that the applicant will comply with the terms and conditions of the General Permit.

Always retain a copy of each of the documents that you send to the Department. If you have any questions concerning how to fill out this form, or other forms related to the Montana Pollutant Discharge Elimination System (MPDES) discharge permitting program, please contact DEQ at (406) 444-5546. Mail the package to the address provided below.

If you have any questions concerning how to fill out this form, or other forms related to the Montana Pollutant Discharge Elimination System (MPDES) discharge permitting program, please contact the Department's Water Protection Bureau at:

Phone: (406) 444-5546 | Fax: (406) 444-1374  
1520 East Sixth Avenue  
P.O. Box 200901  
Helena, MT 59620-0901

U.S. DEPARTMENT OF COMMERCE  
LUTHER H. HODGES, Secretary

WEATHER BUREAU  
F. W. REICHELDERFER, Chief

TECHNICAL PAPER NO. 40

**RAINFALL FREQUENCY ATLAS OF THE UNITED STATES**  
**for Durations from 30 Minutes to 24 Hours and**  
**Return Periods from 1 to 100 Years**

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WASHINGTON, D.C.

May 1961

Repaginated and Reprinted January 1963

For sale by the Superintendent of Documents, U.S. Government Printing Office, Washington 25, D.C. Price \$1.25

