Blue text provides descriptions/examples; delete and replace with black text that is appropriate for the operation.

Black text is to be included in the cover sheet for a new or updated NM component for a CNMP for a CAFO (with cropland) (AF19).

Use the most recent nutrient management plan cover sheet (CAFO (with land) Cover Sheet) as a template, available on the ANMP website 🡪 Plan Writing Tools 🡪 8. Compiling and Reviewing Your Nutrient Management Plan 🡪 Cover Sheets.

(Updated 8/2/21)

**NUTRIENT MANAGEMENT PLAN**

**for**

**Operator Name/Farm Name** (same as listed on NOI/MDE Database)

**Farm Address** (same as listed on NOI/MDE Database)

**Mailing Address** (if different from farm address)

**DESCRIPTION OF OPERATION**: A brief but thorough description that demonstrates understanding of the operation. **The section** **must include: type/number of animals, crop type, size, county, AI number (if known).** Other clarifying aspects should be included, if applicable (use of manure or commercial fertilizer only, phosphorus status of soils and resulting management). A plan reviewer should have a comprehensive understanding of the operation and what will be included in the nutrient management plan after reading this section.

 (Always include the following): This nutrient management plan is one of the required plans needed for a CAFO permit 19AF. **It is (client’s name)’s responsibility to send a copy of this plan to Maryland Department of the Environment (MDE).**

**DATE OF PLAN**: (date completed)

**DURATION OF PLAN**: (month and year(s) the plan includes; specific dates when possible; make sure it matches ‘Plan Update Requirements at the bottom of this cover sheet)

**SOIL SAMPLING AND TESTING**: (who collected the samples; lab and date where samples were analyzed? When do samples need to be updated/recommended sampling time?)

**MANURE SAMPLING AND TESTING**: (who collected the samples; lab and date where samples were analyzed, if applicable?)

A copy of each year’s manure analysis must be submitted with each year’s Annual Implementation Report (AIR).

**MANURE MANAGEMENT**: In a sentence or 2, highlight the operator’s approach to manure management: dairy with storage that spreads in the spring and exports in the fall? farm with storage that is spread in spring and fall? broiler producer that crusts out after every flock? broiler producer that windrows and cuts middles at some frequency? Indicate the amount of storage (volume or duration) or size of storage.

 If manure (on-farm generated or imported) is to be applied, indicate the total number of acres on which manure recommendations are given.

 If any manure is exported, indicate the name and full address of recipient, and the following...

Maryland Department of Agriculture (MDA) requires that producers keep records of manure exports, including the name and address of all receiving operations and quantity of manure removed. Operators must report this information in their Annual Implementation Report (AIR) due to MDA by March 1 each year.

 If manure is imported, indicate the source of the manure (name and full address) and the tons (or gallons) that can be utilized according to the recommendations in the plan, and the following...

Maryland Department of Agriculture (MDA) requires that producers keep records of manure imports, including the name and address of the operation from which manure was imported, the quantity of manure imported, and the acreage to which it was applied. Operators must report this information in their Annual Implementation Report (AIR) due to MDA by March 1 each year.

 Regulations that became effective in December 2016 require the incorporation of manure under many cropping situations. Address incorporation requirement or state reason(s) for which non-incorporation is warranted here (for example, hay or pasture? client’s preference for no-till this cropping season?). If the client prefers to no-till, add this statement: (Client’s name) is aware that the Maryland Department of Agriculture reserves the right to require incorporation of organic nutrient sources on a case-by-case basis.

(Include the following for organic poultry CAFOs)

**OUTDOOR PASTURE AREA FOR ORGANIC POULTRY OPERATIONS:** Outdoor poultry pastures shall be managed to limit soil erosion and runoff such that manure and associated nutrients are not discharged to waters of the state. Management practices may include, but are not limited to, maintenance of full vegetative cover during the vegetative growing season, installation of vegetated buffers, slope and soil modifications to control runoff, and removal of manure in concentrated areas.

**BASIS OF RECOMMENDATIONS**: Nutrient recommendations are both nitrogen & phosphorus based, as required by State of Maryland regulations.

**UM-PHOSPHORUS MANAGEMENT TOOL (UM-PMT)**: Indicate which fields (if any) require the PMT for the current growing season, the P Loss Rating and P restrictions for each field requiring the PMT. If FIV-P≥150 and no PMTs were determined, indicate the reason why. If PMT is required on multiple fields, use the table below in lieu of the paragraph format.

The farms/fields in the table below had soil test phosphorus (expressed as FIV-P) of 150 or above. PMT determinations were conducted for fields on which P-bearing materials will be applied and results of the PMT are listed as the P Loss Rating.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Farm or Tract | Field with FIV≥150 | PMT done?Yes or no? | P Loss Rating LOW, MED, or HIGH | Application Rate Used in Calculation; Explanation/Restriction |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

**Reminder: Include this paragraph when any fields’ erosion loss “RUSLE A” exceeds “T”. Otherwise, omit. (If no PMTs were calculated, omit.)**
**EXCESSIVE EROSION:** While calculating the UM-Phosphorus Management Tool on fields managed in this operation, locations were identified where excessive erosion appears to be occurring. Fields affected are (list farm name(s) and field numbers here). When soil loss due to erosion exceeds “tolerable” soil loss (3 or 5 tons per acre per year – check “T” for dominant map soil unit), long-term productivity is being lost on these fields as topsoil thins. Operator is advised to contact the Soil Conservation District office for advice on reducing erosion on these fields.

**NUTRIENT APPLICATION EQUIPMENT CALIBRATION****:** Application equipment must be calibrated **annually** to estimate actual application rates for all nutrient applications. Equipment must be recalibrated when equipment settings, ground speed, consistency or density of a product varies from the original calibration. Documentation of the calibrations must be recorded and made available during an implementation review conducted by EPA, MDE or MDA. This documentation must include any of the necessary calculations to attain the nutrient rate that was determined.

**SOURCE OF YIELD GOAL INFORMATION**: (operator’s field-by-field records? operator’s knowledge? Web Soil Survey? Other?)

**TIMING**: Guidance on the timing of fertilizer applications is included on the recommendations sheet(s). Also note that nutrient application is prohibited when the soil is saturated, when the ground is covered with snow greater than one inch, or when the ground is hard-frozen greater than two inches. Additional information of a general nature is included in the “NUTRIENT APPLICATION REQUIREMENTS” and “GENERAL PRINCIPLES OF NUTRIENT MANAGEMENT” sections of this plan.

**FIELD STORAGE OF LITTER:** Refer to the *General Discharge Permit for Animal Feeding Operations* for information for the requirements for field storage or stacking of litter.

**BEST MANAGEMENT PRACTICES**: Information and requirements for implementation of Best Management Practices are addressed in the Comprehensive Nutrient Management Plan (CNMP).

**CUSTOM APPLICATION OF NUTRIENTS:** If any nutrient sources are custom-applied, it is imperative that the farmer/operator inform the custom applicator(s) of the recommendations contained in this plan as well as any setbacks that are required. The farmer/operator is solely responsible for ensuring that the nutrient recommendations and setback requirements contained in this plan are followed by all hired contractors and employees.

**RECORD KEEPING REQUIREMENTS**: The Water Quality Improvement Act requires that producers keep records on fertilizer and/or manure usage. Consult the model form and directions included in the record keeping section of this plan for the type of information required. Refer to the *General Discharge Permit for Animal Feeding Operations* for information for the type of records that are required by MDE and EPA.

**CAFO MANURE SETBACK REQUIREMENTS**:

Setbacks (areas where manure may not be applied) are required as follows:

1. A **setback** of at least 100’ from waters of the State, including field ditches, other conduits, intermittent streams, and drinking water wells, shall be maintained; or an **approved alternative** may be substituted for the 100’ setback.
2. A setback of at least 100’ from property lines shall be maintained, unless an approved alternative setback for property lines is established with the consent of the adjacent property owner.

MDE has **approved alternatives** to setbacks from waters of the State. These are listed in the document “Maryland Setback Standards and Approved Alternatives Consistent with CAFO/MAFO Requirements”, a copy of which is included in this nutrient management plan.

 **In your records, indicate whether you observed the setbacks or one of the approved alternatives.**

### Farm Identification Summary

|  |  |  |  |
| --- | --- | --- | --- |
| **Farm Name** | **Tax Account ID Numbers** | **Watershed Location Code** | **Total Acres Farmed (Cropland and Pastures)** |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

### Manure Summary Table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Animal Type and Number** | **Total Manure Generation****(units/yr)\*** | **Manure Avail. for Utilization (units/yr)\*** | **Manure Storage Capacity/Conditions** | **Timing of Application** |
|  |  |  |  |  |
|  |  |  |  |  |

\*See manure generation sheets

(Be sure to indicate units for manure.)

|  |  |  |
| --- | --- | --- |
| Your Name Typed Here |  |  |
| Nutrient Management Advisor/ Certified Consultant |  |  |
| Certification #: |  |  |
| License #: |  |  |

#### Plan Update Requirements

#### As stated in the cover sheet, this plan was developed for use from

(month)(day)(year)-(month)(day)(year)

#### The following is a list of situations that will impact whether or not the attached Nutrient Management Plan will need updating before the end of the time period for which the plan was developed.

1) A change to the **planned crop or cropping rotation**, or introduction of a **new crop** not currently addressed in the existing nutrient management plan.

2) A change in **nutrient source or soil test results**.

3) A change in **acreage** managed of 10 percent or greater, or 30 acres, whichever is less.

4) A change in **animal units** of 10 percent or greater if resultant manure production will require significant management adjustments.