

Title 15

DEPARTMENT OF AGRICULTURE

Subtitle 20 SOIL AND WATER CONSERVATION

Chapter 07 Agricultural Operation Nutrient Management Plan Requirements

Authority: Agriculture Article, §§8-801—8-806,
Annotated Code of Maryland

.01 Scope.

This chapter applies to a farm or agricultural operator and requires the operator to develop and implement nitrogen-based and phosphorus-based nutrient management plans for a farm or agricultural operation by certain deadlines.

.02 Incorporation by Reference.

The performance and technical standards provided in this subtitle are found in the Department of Agriculture's Maryland Nutrient Management Manual (November 1999), Supplement No. 1 (September 2000), Supplement No. 2 (November 2001), and **Supplement No. 3 (September 2004)**, which are incorporated by reference.

.03 Definitions.

A. In this chapter, the following terms have the meanings indicated.

B. Terms Defined.

(1) "Agricultural operation" means a business or activity that:

(a) Tills, crops, keeps, pastures, or produces an agricultural product, including livestock, poultry, plants, trees, sod, food, feed, or fiber by in-ground, out-of-ground, container, or other culture; and

(b) Has a gross annual income of \$2,500 or more, or has eight or more animal units.

(2) "Animal unit" means the unit of measure equivalent to 1,000 pounds of live animal weight.

(3) "Biosolids" means any thickened liquid, suspended or settled solid, or dried residue extracted from sewage at a sewage treatment plant, including domestic sewage, that:

(a) Contains recognized plant nutrients, or liquid byproducts, that meet federal and State regulations for beneficial use by land application or other methods; and

(b) Is regulated as sewage sludge pursuant to the Environment Article, §9-201 et seq., Annotated Code of Maryland.

(4) "**Certified farm operator**" means an individual certified by the Department under this subtitle to prepare a nutrient management plan solely for agricultural land that the individual owns or operates, or where the individual has a legal interest.

(5) "Certified nutrient management consultant" or "consultant" means an individual certified by the Department under this subtitle to prepare a nutrient management plan.

(6) Chemical fertilizer.

(a) "Chemical fertilizer" means a manufactured or blended nutrient source, usually in granular or liquid form, containing a guaranteed analysis of primary nutrients.

(b) "Chemical fertilizer" does not include a product blended from all natural organic fertilizer sources.

(7) "Department" means the Maryland Department of Agriculture or its designee.

(8) “Expected crop yield” means a realistic crop yield for the agricultural operation determined by using yield records or soil productivity information.

(9) “Fertilizer” means a substance containing any recognized primary plant nutrient used for its plant nutrient content and designed for use in promoting plant growth.

(10) “Manure management” means operations and conditions specific to an agricultural operation that has animals, or uses animal manure or waste nutrients from animal production. The purpose of manure management in nutrient management planning is to improve efficiency and effectiveness of nutrient utilization and to minimize the potential for nutrient loss from the management of animals or their manure and associated waste nutrients. Guidelines for manure management are described in the Maryland Nutrient Management Manual, Section III-C.

(11) “Nutrient management plan” means a plan prepared by a certified nutrient management consultant or **certified farm operator** to manage the amount, placement, timing, and application of animal manure, fertilizer, biosolids, or other plant nutrients in order to:

(a) Minimize nutrient loss or runoff; and

(b) Maintain the productivity of soil when growing agricultural products.

(12) “Operator” means a person who manages or owns an agricultural operation.

(13) “Person” means the State, any county, municipal corporation, or other political subdivision of the State, or any of their units, or an individual, receiver, trustee, guardian, executor, administrator, fiduciary, or representative of any kind, or any partnership, firm, association, public or private corporation, or any other entity, unless otherwise provided.

(14) “Plant production goal” means a statement of the estimated length of time that plants will be grown, and some appropriate measure of expected plant size, such as height or diameter.

(15) “Primary nutrients” means a plant food that is essential for normal plant growth and includes total nitrogen (N), available phosphate (P_2O_5), and soluble potash (K_2O).

.04 Nutrient Management Plan—Plan Development and Implementation Deadlines.

A. An operator shall develop and implement a nutrient management plan for the operator’s agricultural operation, according to the following deadlines:

(1) An operator who uses chemical fertilizer in an agricultural operation shall:

(a) Develop a nutrient management plan addressing both nitrogen and phosphorus as the limiting nutrients on that agricultural operation by December 31, 2001, and

(b) Implement the plan by December 31, 2002;

(2) An operator who uses biosolids or animal manure in an agricultural operation shall:

(a) Develop a nutrient management plan addressing nitrogen as the limiting nutrient on that agricultural operation by December 31, 2001, and

(b) Implement the plan by December 31, 2002;

(3) An operator who uses biosolids or animal manure in an agricultural operation shall:

(a) Develop a nutrient management plan addressing both nitrogen and phosphorus as the limiting nutrients on that agricultural operation by July 1, 2004, and

(b) Implement the plan by July 1, 2005; and

(4) An operator who uses a combination of chemical fertilizer, biosolids, and animal manure in an agricultural operation shall comply with the deadlines in §A(2) and (3) of this regulation if that operator uses biosolids or animal manure on a minimum of 10 acres, or 50 percent of an agricultural operation, whichever is less. Phosphorus application rates under this subsection shall follow Cooperative Extension recommendation rates on individual fields where chemical fertilizer is the only nutrient source.

B. An operator who cannot obtain the services of a certified nutrient management consultant to develop a nutrient management plan to meet the deadlines required in §A of this regulation shall be in compliance if:

- (1) The operator provides to the Department proof that:
 - (a) A good faith effort was made to obtain the services of a certified nutrient management consultant at least 60 days before the applicable deadline, and
 - (b) Circumstances beyond the reasonable control of the operator prevented the plan from being completed by the deadline, and

(2) The operator provides on a Department form a signed statement from a certified nutrient management consultant indicating:

- (a) The date and time the consultant was contacted by the operator to request plan development,
- (b) That the consultant was unavailable, and
- (c) A reasonable time frame needed for the development of a plan.

C. An operator who meets the conditions in §B of this regulation, but who does not complete plan development within 1 year of the deadlines set forth in §A of this regulation, is in violation of §A requirements for plan development and implementation, unless the Department determines noncompliance to be attributed to circumstances beyond the control of that operator.

D. Upon application to the Department on a Department form, an operator may request an exemption from the requirements of this chapter for certain activities, including research, education, and demonstration, if the operator:

- (1) Documents the proposed activity and provides this information to the Department prior to its implementation;
- (2) Ensures that impacts on water quality are minimized; and
- (3) Receives written notice of approval for the activity from the Department prior to the start of the activity.

____ E. In determining whether a particular application for exemption will be approved, the Department shall consider the following factors:

- (1) Whether the activity is temporary and its time frame defined;
- (2) Whether a research activity is managed, sponsored, or affiliated with an accredited educational institution or research facility;
- (3) Whether the activity's objectives help to advance knowledge about the management of nutrients; and
- _____ (4) The area and location of the activity in relation to the operation's overall size and potential impacts on adjacent properties, water quality, and natural resources.

F. If a operator is subject to this chapter only because the operator earns \$2,500 or more from the occasional sale of agricultural products as a result of participating in a 4-H or other agricultural youth organization project, the operator is exempt if:

- (1) Verification of active participation in the 4-H or agricultural youth organization activity is made available upon request to the Department; and
- (2) The activity is conducted so the potential for nutrient loss or runoff is minimized.

G. A nutrient management plan required by this chapter shall include:

- (1) All agricultural practices that relate to nutrient use, including, but not limited to, tillage, cropping, pasturage, or production of any agricultural product; and
- (2) Identification, management, and disposition of all primary nutrients produced on, or imported to, the agricultural operation, including land application, off-site transportation, composting, or processing.

.05 Nutrient Management Plan Implementation Requirements.

A. An operator who uses chemical fertilizer, animal manure, or biosolids, as provided in Regulation

.04A of this chapter, shall have a nutrient management plan that shall:

- (1) Be prepared by a certified nutrient management consultant **or by the farm operator, if certified in accordance with this subtitle;**
- (2) Be prepared according to the schedule set forth in Regulation .04A or B of this chapter by using the limiting nutrient determination described in COMAR 15.20.08.05E; and
- (3) Address the following existing factors:
 - (a) All aspects of the agricultural operation, including tillage, cropping, pasture, or production of an agricultural product, such as plants, trees, sod, food, feed, animals, and fiber;
 - (b) Identification, management, and disposition of all primary nutrients produced on, imported to, and exported from the agricultural operation;
 - (c) Manure management conditions that protect water quality and improve manure utilization, and:
 - (i) Encompass all land where animals are kept and all land used for manure storage, treatment, or utilization that is under the control of the agricultural operator,
 - (ii) Contain or manage manure to minimize the potential for nutrient loss or runoff before export to other agricultural operations or receiving facilities when agricultural operators have insufficient land to utilize manure and waste nutrients associated with animal production, and,
 - (iii) Minimize the potential for nutrient loss or runoff prior, during, and after application when an agricultural operator imports animal manure or waste nutrients associated with animal production for nutrient application on the operator's land.

B. A nutrient management plan shall contain recommendations for an agricultural operation, as provided in COMAR 15.20.08.05B—I, for the management of fertilizer inputs and other nutrient sources. A recommendation shall be based on the best information available at the time a plan is prepared, as determined by the Department on a case-by-case basis. When implementing a plan, the operator may not exceed recommended nutrient application rates. The operator shall follow all other recommendations in the plan.

C. Plan Adjustments.

- (1) An operator may adjust the nutrient management recommendation in a plan for any of the following reasons:
 - (a) Occurrence of a condition beyond the control of the operator, including a natural disaster, unanticipated weather condition, or animal mortality, or disease; or
 - (b) Occurrence of unanticipated conditions, such as market changes or economic factors that may cause modification of the agricultural operation, or other limitations, such as equipment calibration limits, or limits on the availability of commercial fertilizer blends to reasonably meet nutrient management recommendations.
- (2) Any adjustment shall be:
 - (a) Consistent with plan criteria; and,
 - (b) Documented under Regulation .06B of this chapter.
- (3) An adjustment by the operator shall require that a revision to a nutrient management plan be **made and documented** when the adjustment is necessary, because either new land or planting area, or animals are not addressed in the current nutrient management plan and they exceed the thresholds described in §D of this regulation.

D. Plan Maintenance, Updates, and Revisions.

- (1) At least once every 3 years from the date that the current plan was prepared, the operator shall revise and update the plan.
- (2) **An operator who uses only commercial fertilizer may continue to follow nutrient recommendations of a nutrient management plan prepared by a certified consultant beyond the 3 years if all of the following apply:**

- (a) the operator complies with the soil testing requirements set forth in 15.20.08.05 D, including any changes to plan requirements under this chapter;
- (b) the soil test analysis verifies that the phosphorus fertility index value (FIV) is 100 or less; and,
- (c) there have been no changes to the operation including the crop rotation, management and tillage systems, and crop yield goals.

(3) Changes in an agricultural operation may require the operator to modify or update a plan when the information in the plan is inadequate, incomplete, or fails to address a change. These changes include a change:

- (a) To the planned crop or cropping rotation, or introduction of a new crop when it is not currently addressed in an existing nutrient management plan, unless the new crop will have fertility management similar to that crop originally planned;
- (b) Of nutrient source or soil test results that indicate a change in nutrient recommendations;
- (c) Of 10 percent or greater in acreage managed, or 30 acres, whichever is less; or
- (d) In average annual number of animal units of 10 percent or greater, when resultant manure production will require significant management adjustments.

(4) An operator shall maintain a plan to meet plan objectives, including implementation of best management practices, strategies, or a phased-in approach identified in the plan to achieve soil fertility within optimal ranges.

.06 Record-Keeping and Reporting Requirements.

A. Operator Reporting Requirements—Plan Development.

(1) An operator shall submit to the Department a **summary of the** nutrient management plan for the agricultural operation **in a form that the Department requires** when it is **first developed to meet requirements of this chapter** according to the deadlines provided by Regulation .04A and B of this chapter.

(2) A nutrient management plan submitted to the Department by an operator **for the first time** shall include:

- (a) Descriptive information of the agricultural operation provided on a Department form, including the owner or operator, location of the operation, type of agricultural operation, and name of the individual preparing the plan;
- (b) A summary section of the plan indicating all nutrient recommendations during the plan period, as provided by COMAR 15.20.08.04F;
- (c) Soil analysis information; and
- (d) A clearly recognizable map or aerial photograph identifying location and boundaries of the agricultural operation, individual field boundaries or management units, and acreage.

(3) **Following the first submission of required nutrient management plan information to the Department, all operators subject to this chapter shall file by March 1 of each year an end of the cropping season report that covers the previous calendar year. The report shall be submitted on a form that the Department requires, and shall include, but not be limited to:**

- (a) **A summary of basic information identifying the operator and characterizing the farm operation to include any changes in information on the agricultural operation that was provided in the Reporting Form for the first submitted plan;**
- (b) **Total acreage managed under a nutrient management plan by crop and total nutrients applied by crop;**
- (c) **A statement verifying that :**
 - (i) **The information provided is true and accurate; and**
 - (ii) **a valid nutrient management plan will be followed during the current cropping season and upcoming cropping year.**

(4) The Department shall keep, and shall protect the confidentiality of, all nutrient management plan information submitted, so as to protect the identity of the person for whom the plan was developed.

B. Operator Record-Keeping Requirements—Plan Implementation.

(1) The Department may periodically review records of an agricultural operator **solely** to determine if a nutrient management plan is implemented **in accordance with the provisions of this chapter**.

(2) When reviewing an operator's records, the Department shall:

(a) Arrange a meeting with the operator **at a reasonable time and location**, that allows the property owner or operator to be present, with a minimum of 48 hours prior notice; and

(b) Conduct the evaluation in a manner that minimizes any inconvenience to the operator; and

(c) A person operating a farm who fails to cooperate with the Department's request to conduct a site visit or review a nutrient management plan and records relating to the plan is subject to the penalties provided in Regulation .07 of this chapter.

(3) Except as provided in this section, an operator subject to this chapter shall retain for 3 years the following records:

(a) Any nutrient management plan prepared for an agricultural operation, as required under this chapter;

(b) Soil analysis results for an agricultural operation;

(c) For agricultural crops produced or harvested annually, specific field or management unit yield information for the last 5 years which may include estimates based on volume or weight;

(d) For agricultural products that are not produced or harvested annually, or whose production is not managed based on an annual yield goal, such as nursery plants, information documenting nutrient use to meet specific production goals for three production cycles, or 3 years, whichever is less;

(e) For out-of-ground or container production, a description of production cycles and methods for all plants grown, including the following:

(i) The length of the production cycle and primary nutrients applied in each growing cycle,

(ii) A description of substrates used, and

(iii) An analysis of organic materials used as a source of nutrients in the substrate;

(f) Receipts related to the purchase of nutrients;

(g) Documentation of the timing, rate, quantity, type or types, and analysis of nutrients used with reference to field location and number, or management unit, consistent with the production plan, site map, or aerial photograph provided in the nutrient management plan identifying that agricultural land;

(h) Manure analysis results when animal manure is used as a nutrient source, and information about the manure management system, if animals are part of the production unit or if animal manure is used as a nutrient source, but animals are not produced on the operation;

(i) Monitoring information on runoff testing, including test results, as required for out-of-ground agricultural operations by COMAR 15.20.08.07D; and

(j) Documentation justifying any changes made to the nutrient management plan, as provided under Regulation .05C of this chapter.

(4) An operator shall keep the records required by §B(3)(a)—(h) of this regulation in a manner acceptable to the Department and shall make them available to the Department, upon request.

.07 Assessment of Penalty.

A. An operator who violates any deadline for having a nutrient management plan, as provided in Regulation .04A of this chapter, is subject to a written warning for a first violation. If an operator fails to comply with the plan development requirements, as provided in Regulation .04A of this chapter, after a reasonable period of time following notice of violation, an operator is subject to an administrative penalty of not more than \$250 for a second violation and any subsequent violations.

B. Except as provided in §A of this regulation, an operator who violates any provision of this chapter, or who fails to implement a plan by the implementation deadline, as provided in Regulation .04A of this chapter, is subject to a written warning for a first violation. If an operator fails to comply with the plan implementation requirements after a reasonable period of time following notice of violation, an operator is subject to an administrative penalty for subsequent violations of not more than \$100 for each violation. The total penalties imposed on a person for each violation may not exceed \$2,000 per operator per year for each nutrient management plan.

C. The Department shall consider the following when assessing a civil penalty under §B of this regulation:

(1) The willfulness of the violation, the extent to which the existence of the violation was known to the violator, but uncorrected by the violator, and the extent to which the violator exercised reasonable care;

(2) Any actual harm to human health or to the environment or the natural resources of this State;

(3) The available technology and economic reasonableness of controlling, reducing, or eliminating the violation; and

(4) The extent to which the current violation is part of a recurrent pattern of the same or similar type of violation committed by the violator.

D. Each day that a violation of this chapter occurs, except for failing to meet a deadline for having a plan, as provided in Regulation .04A of this chapter, a separate violation under this chapter has occurred. Daily penalties do not continue to accrue as long as the operator takes reasonable steps to correct the violation. The maximum penalty accrued may not exceed \$2,000 per operator per year for each nutrient management plan.

E. Unless a stay has been granted, an operator against whom a civil penalty has been imposed under this regulation shall promptly pay the penalty to the Department.

F. If an operator violates any provision of this chapter, the Department may require repayment of Agricultural Water Quality Cost Share funds already disbursed to the operator for a project that an operator is required to maintain, and may deny or restrict future cost share payments to the operator under COMAR 15.01.05.

G. If an operator fails to comply with the provisions of Regulation .04A of this chapter following the third citation by the Department, the violation shall be referred to the Maryland Department of Environment for further action under COMAR 26.08.02.04.

H. An operator may appeal the Department's decision to impose a penalty under Agriculture Article, §2-405, Annotated Code of Maryland.

