

**Virginia State Instruction
Title 190 – Ecological Sciences
Part 405 – Comprehensive Nutrient Management Plans**

VIRGINIA INSTRUCTION NO. 190-381

SUBJECT: CPA-COMPREHENSIVE NUTRIENT MANAGEMENT PLAN (CNMP) 102

Purpose and Scope

- (a) A CNMP is a conservation plan that is unique to an animal feeding operation (AFO). It is a grouping of conservation practices and management activities which, when implemented as part of a conservation system, will help to ensure that both production and natural resource protection goals are achieved.

An AFO is an operation where animals have been, are, or will be confined for at least 45 days (does not have to be continuous) over a 12 month period, and where there is no forage grown or no vegetation, in the confinement area during the normal growing season over any portion of the lot or facility.

A farm operation includes all units of land on which manure is generated and on which it is managed. This may include several farms, if they are owned or rented by the same operator and are managed under a single nutrient management plan. The part(s) of the farm unit on which manure is generated may be located at any distance from the part of the farm unit to which manure is applied.

CNMPs are developed in accordance with NRCS conservation planning policy and rely on the planning process and meet the established conservation practice standards found in the NRCS Field Office Technical Guide (FOTG). A CNMP identifies management and conservation actions that will be followed to meet clearly defined soil and water conservation goals, including nutrient management on AFOs. The development of a CNMP requires a comprehensive engineering and conservation planning resource assessment of current site conditions. Management options and structural alternatives are developed to address resource concerns identified during the assessment.

A CNMP that is developed by NRCS, a conservation partner, or TSP will have the appropriate CNMP conservation signature approvals, as defined in GM-180, Parts 409 and 411. Per GM-180, the NRCS-approved CNMP Planner will assure that an appropriate planning process has been followed in the development of the CNMP and that all needed elements have been prepared by an appropriate NRCS Certified Conservation Planner and/or appropriate specialist(s). The NRCS-approved CNMP Planner signs the CNMP to ensure technical adequacy and that all included elements are technically compatible, reasonable, and can be implemented. The certified CNMP planner must possess the knowledge, skills, and abilities to manage the development and coordination of all CNMP elements.

A CNMP shall be prepared when NRCS or NRCS-designated agents are providing technical or financial assistance to an AFO or Confined Animal Feeding Operation (CAFO) to address manure

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or wastewater handling and storage/treatment and/or when providing technical or financial assistance for nutrient management that involves the application of manure and wastewater. Once developed, the CNMP shall be signed by the producer before the installation of any waste storage/handling facilities and nutrient management activities identified in the CNMP are initiated.

- (b) General criteria for CNMP development will, at a minimum, meet the following criteria:
- (1) Include all production areas, including the animal confinement, feed, and other raw materials storage areas, animal mortality facilities, and the manure handling containment or storage areas.
 - (2) The land treatment area, including any land under control of the AFO owner or operator, whether it is owned, rented, or leased, and to which manure or process wastewater is, or might be, applied for crop, hay, pasture production, or other uses.
 - (3) Meets Natural Resources Conservation Service (NRCS) quality criteria for water quality (nutrients, organics, and sediments in surface and groundwater) and soil erosion (sheet and rill, wind, ephemeral gully, classic gully, and irrigation induced natural resource concerns on the production area and land treatment area).
 - (4) Mitigates, if feasible, any excessive air emissions and/or negative impacts to air quality resource concerns that may result from practices identified in the CNMP or from existing on-farm areas/activities.
 - (5) Complies with Federal, State, Tribal, and local laws, regulations, and permit requirements.
 - (6) Satisfies the owner/operators production objectives.

Note: If it is probable that the producer will forward the CNMP to the State regulatory agency in pursuit of a National Pollutant Discharge Elimination System (NPDES) permit, the planner should include all farm acreage that could foreseeably receive manure. This additional acreage, when included in the CNMP, will increase planning options should the plan need to be altered after it becomes a regulatory plan. Planning flexibility makes it less likely that the NPDES permit will need to be revised.

Objective of a CNMP

USDA's goal is for AFO/CAFO owners and operators to take voluntary actions to minimize potential air and water pollutants from storage facilities, confinement areas, and land application areas. The objective of a CNMP is to provide AFO owners/operators with a plan to manage manure and organic by-products by combining conservation practices and management activities into a conservation system that, when implemented, will control soil erosion and protect air and water quality. USDA has an associated goal of assisting CAFOs to develop CNMPs that can be used for NPDES permitting purposes.

A CNMP is a conservation plan for an AFO that follows the nine step conservation planning process. CNMPs help the producer manage activities common to AFOs. The management of production and land treatment areas must be coordinated to enable the efficient and safe use of manure resources on the farm. There are natural resource concerns associated with both areas and there are conservation practices that address those concerns. Management of livestock operations typically involve a complex

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set of considerations that can change based on dynamics of the market, weather, supplies and management decision. Farm produced products can include by-products like compost or manure. These by-products must be stored, utilized on the farm, or transferred to another location.

CNMPs account for the nutrient flow through the farm system and documents agricultural utilization of nutrients according to science-based management strategies. USDA and EPA have agreed that the CNMP is acceptable documentation for those seeking an NPDES permit, with the addition of “chemical handling” provisions.

The logical CNMP development process, coupled with a standardized template, ultimately results in the CNMP document, which provides a record of producer decisions and guidance to the producer and planner for implementation of the plan. Implementation of the CNMP is the producer’s responsibility. The CNMP must be written in concise and understandable language to enable the producer to understand and implement the elements of the CNMP. Additionally, it must meet the producer’s goals and objectives, address the natural resource concerns, and provide the producer with a land treatment plan for nutrients.

The CNMP includes the list of conservation practices used to meet the resource concerns of the production and land treatment areas of the farm. Guidance for operation and maintenance (O&M) of practices is contained in the appropriate conservation practice standard located in the FOTG.

Conservation practice maintenance includes periodic inspections and necessary repairs, and recordkeeping. If it is probable that the producer will forward the CNMP to the State regulatory agency in pursuit of an NPDES permit, the planner should include sufficient reporting and documentation information as required by the State.

Element Criteria for CNMP Development

CNMPs will, at a minimum, contain actions that address soil erosion and water quality criteria for the feedlot, production area, and all land on which the manure and organic by-products will be applied. This includes addressing soil erosion to reduce the transport of nutrients within or off of a field to which manure is applied. CNMPs will meet requirements of the NRCS FOTG conservation practice standards for all practices contained in the CNMP and follow the NRCS conservation planning policy.

Each CNMP must document Environmental Compliance and other effects on the environment for the planned system. This requires evaluation and documentation of compliance with the National Environmental Policy Act, the Endangered Species Act, and the National Historic Preservation Act. Development of the CNMP will consider each of the following elements, and decisions regarding each must be documented. The elements are as follows:

- (1) Background and Site Information
- (2) Manure and Wastewater Handling and Storage
- (3) Farmstead Safety and Security
- (4) Land Treatment Practices
- (5) Soil and Risk Assessment Analyses

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- (6) Nutrient Management according to the criteria in the Nutrient Management Conservation Practice (Code 590)
- (7) Feed Management (optional, as needed)
- (8) Other Utilization Activities (optional, as needed)
- (9) Recordkeeping
- (10)References

Feed management and other utilization options are not required elements of a CNMP. However, these elements should be included in the CNMP, if needed, to help manage the farm nutrient balance.

This standardized and uniform development process makes it easier to develop a quality plan efficiently and help maintain consistency and ensure appropriate documentation of a CNMP. The precise content of a CNMP will vary as it is tailored to meet the needs of the AFO owner and/or operator. Please refer to CNMP Statement of Work and the CNMP Plan Criteria for specifics on each of these elements. Further guidance can be found in the policy references under the additional guidance.

Virginia CNMP Plan Format

It is important to remember that CNMPs are developed in accordance with NRCS conservation planning policy and rely on the planning process and established conservation practice standards. Generally many of the required elements and documentation for a CNMP may already exist in the client's case file. Therefore Virginia NRCS does not require a separate stand alone CNMP to be written. Together the CNMP format may be a collection of the conservation plan, agricultural waste management system (AWMS) Plan, and the nutrient management plan which addresses all production areas of the operation and all of the associated spreadable acres. A separate CNMP containing all required elements and documentation may be developed if desired by the client or the planner. Either format must account for all required elements and the technical criteria associated with each element.

An AWMS Plan must meet the requirements set forth in the Virginia amendment to the Agricultural Waste Management Field (AWMF) Handbook.

The CNMP plan criteria, the CNMP Statement of Work, and the CNMP Cover Page and Approval Signature Page and Checklist can be found in the Virginia Field Office Technical Guide under Section III.

The VA CNMP Cover Page and Approval Signature Page and Checklist must be completed and signed by the appropriate CNMP conservation planner and/or specialist(s) meeting the certification approvals, as defined in GM-180, Parts 409 and 411.

Reporting

Although a CNMP may involve planning on several acres, tracts and/or farms, the official reporting unit is No. (Number). When planned or applied, one CNMP is report per AFO. CNMPs should be reported and planned in the land unit HQ.

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Additional Guidance

A CNMP addresses all land units that the AFO owner and/or operator owns or has decision-making authority over and on which manure and organic by-products will be generated, handled, stored, or applied. This guidance is to help maintain consistency, quality and ensure appropriate documentation of a CNMP.

The national policies and procedures as well as policy set forth in this document for CNMPs will be adhered to in Virginia for CNMP development. Please refer to the following for more information concerning CNMP development and criteria.

NRCS General Manual Title 180 Part 409 – Comprehensive Nutrient Management Plans
NRCS General Manual Title 190 Part 405 – Comprehensive Nutrient Management Plans
NRCS Handbook Title 190 Part 620 Comprehensive Nutrient Management Planning
NRCS National Engineering Manual, Part 651, Agricultural Waste Field Handbook
NRCS National Planning Procedures Handbook
NRCS Field Office Technical Guide
NRCS Environmental Compliance Handbook
NRCS Cultural Resources Handbook