

Part 405 – Comprehensive Nutrient Management Plans

Subpart A – General

405.0 Purpose

This directive establishes the NRCS minimum national policy for comprehensive nutrient management plans (CNMPs).

405.1 Background

A. In 1999, the Unified National Strategy for Animal Feeding Operations directed USDA and the U.S. Environmental Protection Agency (EPA) to work together to address environmental and public health issues associated with animal feeding operations (AFOs). The strategy also defined the CNMP and the relationship between voluntary and regulatory programs.

B. The Clean Water Act (CWA) gives the EPA authority to regulate certain point source dischargers of pollutants into waters of the United States. Agricultural livestock operations, which meet the concentrated animal feeding operation (CAFO) definition or have been designated as a CAFO, that discharge pollutants by a point source into waters of the United States must have a National Pollutant Discharge Elimination System (NPDES) permit or face the risk of regulatory action. Under the CWA, a concentrated CAFO is defined as a point source. Any AFO can be designated as a CAFO if it is a significant contributor of pollutants to waters of the United States.

C. USDA's goal is for AFO/CAFO owners and operators to take voluntary actions to minimize potential water and air pollutants from storage facilities, confinement areas, and land application areas. The objective of a CNMP is to provide AFO owners and operators with a plan to manage manure and organic byproducts by combining conservation practices and management activities into a conservation system that, when implemented, will control soil erosion and protect water and air quality.

D. If an AFO/CAFO land-applies manure, litter, and process wastewater in accordance with site-specific nutrient management practices that ensure appropriate agricultural utilization of the nutrients in the manure, litter or process wastewater, as specified in 40 CFR Section 122.42(e) (vi)–(ix), then any subsequent precipitation-related discharge from the AFO/CAFO's land-application areas is agricultural stormwater (40 CFR Section 122.23(e)).

E. The CNMP may provide acceptable documentation for elements of the NPDES permit requirements. The CAFO decisionmaker (principal controlling producer or landowner) can submit the CNMP as part of an NPDES permit application, but must also fulfill all additional requirements of the NPDES permit.

F. Refer to Title 180, General Manual (GM), Part 409, Section 409.10, for policy regarding conservation planning and the criteria to achieve an NRCS "CNMP Planner" designation.

405.2 Authorities

130-GM, Part 400, Subpart B, Section 400.13, assigns functional responsibilities for NRCS mission and program. 190-GM, Part 405, Subpart C, assigns functional responsibilities for CNMPs.

405.3 Definition

A CNMP is a component plan of a conservation plan that includes structural practices, management activities, and land management practices for an AFO associated with crop or livestock production that collectively ensures that the purposes of crop or livestock production and preservation of natural resources (especially soil erosion and water and air quality as related to nutrient related impacts) are compatible.

405.4 Plan Development

The proper development, implementation, and adoption of a CNMP requires direct communication between and involvement of NRCS staff, the producer, and the technical service provide (TSP) or consultant when contracted by the producer. Because of the importance of communication with all parties and the complexity of a CNMP, the NRCS conservation planning process contained in Title 180, National Planning Procedures Handbook, will be used throughout the development and implementation of CNMPs. The conservation planning process will be used to determine producer's objectives and address all resource concerns relevant to the farmstead animal feeding operation, and associated crop, pasture, range, and other land receiving manure from the farming operation. After alternatives have been reviewed with the producer, document the selected conservation practices for implementation in the CNMP "Record of Decisions." NRCS practice "Implementation Requirements" (i.e., plans and specifications or job sheets) will be developed for each planned practice sequentially according to the planned schedule of implementation. All conservation practices planned in the CNMP must meet NRCS practice standards, where applicable standards exist.

Part 405 – Comprehensive Nutrient Management Plans

Subpart B – Policy

405.10 Comprehensive Nutrient Management Plans (CNMPs)

A. USDA's goal is for animal feeding operations (AFOs) and concentrated animal feeding operations (CAFOs) owners and operators to take voluntary actions to minimize potential soil erosion and water pollutants from storage facilities, confinement areas, and land application areas. The CNMP, as a minimum, addresses the resource concerns for soil erosion, water quality, and air quality to the planning criteria level as outlined in the Title 180, National Planning Procedures Handbook (NPPH).

B. Prepare a CNMP when NRCS or NRCS-designated agents are providing technical or financial assistance to an AFO/CAFO to address manure or wastewater handling and storage, treatment, and nutrient management that involves the application of manure and wastewater associated with the AFO/CAFO. **Note:** A CNMP is not required for an operation that applies manure or wastewater as a nutrient source and has no livestock or manure storage facilities (permanent or short-term). Once developed, the producer must sign the CNMP before the installation of any waste storage handling facilities and initiation of any nutrient management activities identified in the CNMP.

C. Develop the CNMP in accordance with all applicable local, Tribal, State, and Federal water quality goals or regulations. Evaluate and use form NRCS-CPA-52, "Environmental Evaluation Worksheet," to document compliance with the National Environmental Policy Act (NEPA), Endangered Species Act (ESA), and National Historic Preservation Act (NHPA), and other effects on the environment. Information on evaluation and documentation can be found on NRCS Electronic Directives System in Title 190, National Environmental Compliance Handbook, and Title 190, National Cultural Resources Procedures Handbook.

D. Where soil "T" values are less than 5 tons per acre per year, at the discretion of the State Conservationist, an AFO may be granted an exception to the need to meet the planning criteria for soil erosion (sheet, rill, or wind) natural resource concerns if all of the following conditions are met:

- (1) Applicable conservation practices are planned, installed, and maintained to prevent the transport of manure, wastewater, and applied nutrients from production fields to adjacent waterways and water bodies, including field buffers. Installed practices must effectively prevent the degradation of water resources and meet Federal, State, Tribal, and local regulations.
- (2) For manure and process wastewater application, applicable conservation practices are planned, installed, and maintained according to a State-approved phosphorus risk assessment (P index, phosphorus threshold, or soil test phosphorus), which is used to determine the level of conservation needed to minimize the movement (surface or subsurface) of phosphorus to adjacent waterways and water bodies. In all cases, the manure phosphorus application rates are based on soil test phosphorus results. Guidance for developing these acceptable rates is found in the 190-GM, Part 402, "Nutrient Management," and Title 190, National Agronomy Manual.
- (3) The sheet/rill or wind erosion may not exceed an average annual soil loss of 5 tons per acre per year or exceed highly erodible land criteria of 2T where the soil map components have T values of 2 or less.

E. Minimum Content and Format of the CNMP for the Client (as Delivered to the Client)

The format for the CNMP will generally follow the same content and format used for a conservation plan per 180-NPPH, Part 600, Subpart D, Section 600.31, “Conservation Plan.” Below is the basic content and format for the client copy of a CNMP (planning notes, design notes, and inventory and evaluation data, etc., are maintained in the client case file). Minimize duplication between sections.

- (i) Signature page with signatures by the certified CNMP planner or CNMP certified technical service provider (TSP) and the client. The signature page must also include farm contact information and the dates of the plan period. See template in section 405.14 exhibit.
- (ii) Record of Decisions for the AFO Farmsteads (Production and Manure Handling Areas)
 - Record of decisions and schedule of implementation with a description of the planned and existing practices.
 - Plan maps showing existing and planned structures (See 180-NPPH, Subpart A, Section 600.31, for map requirements).
 - Soils maps for the headquarters with the appropriate soil interpretations.
 - Brief description of the AFO (both existing and proposed), including the type of animal, number of animals, average weight, number of days confined, type of manure storage, existing storage volumes and sizes (when applicable), and maximum length of storage available (these are generally tables printed from animal waste planning software).
 - If applicable, planned imports, exports, and on-farm transfers of manure.
 - Reference the implementation requirements (IR) or engineering plans for practices already implemented. (Plans and specifications for practices are to be maintained in the case file.) For structures installed prior to this plan that were installed without NRCS assistance, the structures should be shown on the appropriate plan map and noted in the record of decisions that the structures were installed without NRCS technical or financial assistance.
- (iii) Record of Decisions for the Crop, Pasture, Range, and Other Lands Where the Nutrients Will be Applied
 - Record of decisions and schedule of implementation with a description of the planned and existing practices.
 - Plan maps showing existing and planned practices and land application setbacks (See 180-NPPH, Part 600, Subpart A, Section 600.31, for map requirements).
 - Soils maps for the crop, pasture, and range with the appropriate soils interpretations (as needed).
 - Include the IRs for practices that are necessary for completing the risk assessments. This would include such practices as conservation crop rotations, residue management practices, filter strips, contouring, etc. The nutrient management plan, due to its size and complexity, will be placed in a separate section.
 - Reference the IRs or engineering plans for practices already implemented. (Plans and specifications for practices are to be maintained in the case file.) For practices installed prior to this plan that were installed without NRCS assistance, the structures should be shown on the appropriate plan map and a note in the record of decisions that the structure was installed without NRCS technical or financial assistance.

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- (iv) Conservation Practice Standard (CPS) Code 590, Nutrient Management, following the established criteria, plans and specifications, operation and maintenance, and recordkeeping.

F. Contents of the NRCS CNMP Case File (in Addition to the Requirements Outlined in 180-NPPH, Part 600, Subpart C, Section 600.31)

- (1) Client information
- (2) Client's objectives
- (3) Environmental documentation—Form NRCS-CPA-52, "Environmental Evaluation Worksheet," and any other documents needed to meet the requirements of NEPA or other applicable environmental requirements, such as the ESA.
- (4) CNMP and record of decisions (practice schedule), with planner, decisionmaker, and local conservation district (if required) signatures
- (5) Assistance notes
- (6) Geospatial layers (if available) for planned land units, practices, resource inventory, and other map features.
- (7) Maps used in CNMP development process—conservation plan, soils, CNMP map of headquarters with livestock support facilities and features, land treatment maps, and any other maps needed to communicate the existing and planned practices.
- (8) Forms and worksheets used in developing and evaluating alternatives
- (9) Local conservation district information related to the plan
- (10) Inventory and analysis information (this would include all resource concern assessments (e.g., erosion, N leaching index, P index, water quality assessments, air quality site assessment (as required)), livestock inventory, manure/waste estimated production, manure imports/exports, manure storage, irrigation assessments, evaluation of existing waste handling/storage structures for integrity and capacity, site feasibility data if needed (such as topographic survey, soil boring, or flood zone information).)
- (11) Photographs, audio, and video files
- (12) Determinations (such as highly erodible land, wetland.)
- (13) Receipt for services
- (14) Other appropriate supporting documents and local or State-required documentation
- (15) Engineering notes
- (16) Operation and maintenance agreements and plans
- (17) Recordkeeping, as appropriate
- (18) Financial contract documents, if applicable
- (19) Notes and computations to support all conservation practice design documentation
- (20) All completed IRs and engineering plans
- (21) Documentation to support the certification of applied practices.
- (22) All electronic files or printed documents (if electronic files are not available) used for design and nutrient management planning

405.11 Minimum Technical Requirements Essential for Providing CNMP Technical Assistance

A. This section applies to NRCS and conservation partners, NRCS agents, and TSPs. See 180-GM, Part 409, for technical requirements for CNMP certification. Additional technical requirements are listed below.

B. The CNMP must be approved by an NRCS-approved CNMP planner (includes partners and TSPs certified by NRCS), as defined in 180-GM, Parts 409 and 411.

C. Ensure that all necessary engineering work is properly documented with necessary signatures.

405.12 Agency-Supported CNMP Software

A. Planners are strongly encouraged to take advantage of the software identified below that is designed to streamline the CNMP development process, and improve the quality of CNMP output products.

B. Customer Service Toolkit (CST) or Equivalent.—CST is currently available for NRCS and partner employees.

C. Manure Management Planner (MMP)

(1) MMP is the only NRCS nationally supported software used to develop a nutrient management plan (NMP). MMP is used to automate the NMP development process. States can add additional items to the formatted template sections to meet local and State requirements. Until CST is repurposed for TSP, use the MMP may also be used to record conservation planning decisions for the CNMPs developed by TSPs.

(2) States may adjust their CNMP templates to accommodate the additional requirements for State and local regulations.

D. The Geospatial Nutrient Management Tool (GNT) is a key component of the automated NMP development package, and makes possible the importation of CST plans into MMP. GNT can also be used as a geographic information system (GIS) “front-end” for MMP to lay out an operation’s fields and setback areas spatially to automatically determine the following for each field:

(1) Total field size.

(2) Setback area acres.

(3) Spreadable acres (total acres less any setback or other sensitive areas within a field).

(4) Soil types.

(5) Water bodies.

(6) Hauling distances.

(7) Connectivity between GNT and MMP expands the number of map output options for inclusion in the CNMP and NMP documents. Connectivity with CST allows older plans to be modified and used to generate an NMP.

E. An NMP may be developed by other means (alternative State-approved software), as long as CPS Code 590, Nutrient Management criteria, plans and specifications, operation and maintenance, and recordkeeping requirements are followed.

405.13 Roles and Communications

A. NRCS provides financial and technical assistance to the producer.

B. The producer interacts directly with regulatory and permitting authorities. The producer makes decisions and releases farm-specific information to regulatory and permitting authorities. NRCS does not interact on behalf of the producer with the regulatory and permitting authorities.

C. The producer hires TSPs and private consultants, where applicable. The producer makes decisions and releases farm-specific information to the TSP or consultant. The producer may authorize, in writing, for NRCS to release farm-specific information directly to the TSP or consultant.

D. Good communication between all involved parties is essential for the development of quality CNMPs. TSPs must be in communication with USDA field service center staff and the client throughout the CNMP process and in the development, review, and delivery of the CNMP output products.

E. NRCS employees must not release farm-specific information to regulatory and permitting authorities. When the CNMP is used for regulatory and permitting purposes (National Pollutant Discharge Elimination System (NPDES) permit), the producer is responsible for follow-up and operation and maintenance of the CNMP, including recordkeeping. NRCS employees or USDA agents will provide to the producer, design notes, inventory and evaluation information, etc., when requested by the producer. This may be needed by the producer for general information or the producer may need this data to complete the application for NPDES or other State or local permits. It is the producer's responsibility to maintain the required records for the CNMP and required permits. Specific written permission from the landowner and decisionmaker is required before the NRCS releases farm-specific information to USDA agents or nonregulatory entities (TSPs).

405.14 Exhibit

CNMP Signature Page

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Subpart C – Policy

405.20 NRCS National Headquarters

A The Deputy Chief for Science and Technology (S&T), under the direction of the Chief of NRCS, provides leadership for continued implementation of technologies and processes that support comprehensive nutrient management plans (CNMPs). S&T organizational units have the following roles and responsibilities:

- (1) Director of the Ecological Sciences Division (ESD), under the direction of the Deputy Chief for S&T—
 - (i) Provides leadership for development of technical standards and other technologies to support CNMP development and implementation.
 - (ii) Provides leadership for incorporation of CNMP policy into NRCS conservation planning policy and procedures.
 - (iii) Provides assistance with the training needs related to CNMP planning and implementation.
- (2) Director of the Conservation Engineering Division (CED), under the direction of the Deputy Chief for S&T—
 - (i) Provides leadership for development of technical standards and other technologies to support CNMP development and implementation.
 - (ii) Provides leadership for incorporation of CNMP policy into NRCS conservation planning policy and procedures.
 - (iii) Provides assistance with the training needs related to CNMP planning and implementation.
- (3) Directors of the national technology support centers (NTSCs), under the direction of the Deputy Chief for S&T—
 - (i) Provide technical assistance to State Conservationists for implementation of CNMP policy, development, and application.
 - (ii) Utilize the technology development and acquisition teams (Manure Management Team, Water Quality and Quantity Team, Air Quality and Atmospheric Change Team, and the Energy Team) to acquire new technologies to address nutrient management concerns and facilitate their transfer to States.
 - (iii) Facilitate necessary updates of national conservation practice standards to ensure the latest technology is available to States, USDA field service centers, conservation partners, designated agents, and TSPs that develop CNMPs.

B. Deputy Chief for Programs, under the direction of the Chief, provides leadership for incorporation of CNMP policy into NRCS financial assistance program delivery.

The coordinator of the TSP team, under the direction of the Deputy Chief for Programs—

- (i) Coordinates the TSP certification criteria with CED and ESD.
- (ii) Keeps the TechReg certification criteria related to CNMPs current for TSPs.
- (iii) Provides leadership to encourage the use of TSPs.

C. Deputy Chief for Strategic Planning and Accountability, under the direction of the Chief, provides leadership for incorporation of CNMPs into the NRCS reporting system and provides oversight and evaluation functions associated with CNMP implementation.

405.21 NRCS Regions

Regional Conservationists work with State Conservationists to ensure consistent implementation of and compliance with CNMP policy on a regional basis.

405.22 NRCS State Offices

State Conservationists—

- (1) Ensure that NRCS State policies are consistent with national CNMP policy.
- (2) Determine procedures to ensure that CNMPs are implemented according to the Field Office Technical Guide standards.
- (3) Utilize available tools and technologies to implement CNMP policy.
- (4) Provide recommendations for improvement of CNMP technology development or implementation to ESD and CED.
- (5) Ensure adequate staff and TSPs are trained as certified CNMP planners to achieve timely and quality CNMP planning and implementation.
- (6) Provide State leadership for the coordination and implementation of CNMP policy, criteria, and technical guidance.
- (7) Provide State leadership for the formulation and maintenance of State certification required by law or regulation standards for TSPs associated with CNMPs.
- (8) Provide State leadership for the development and maintenance of the State's CNMP development support structure, including cooperation with State-based regulatory authorities and other appropriate agencies, entities, or individuals, to clarify regulatory and technical requirements for animal feeding operations, coordinate CNMP strategies, and ensure that the most up-to-date nutrient management planning data are available and being utilized.

405.23 NRCS Area Offices or Equivalent

Area conservationists and equivalents—

- (1) Assist field offices with implementing the CNMP policy and technical criteria.
- (2) Report, recommend, and implement changes needing to be addressed with CNMP planning.
- (3) Adhere to State and local regulations and guidelines.

405.24 NRCS Field Offices

District conservationists and equivalents—

- (1) Implement the CNMP policy and technical criteria.
- (2) Report issues needed to be addressed with CNMP planning and implementation.
- (3) Adhere to State and local regulations and guidelines.