Nutrient Management Plans

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<th>Topic</th>
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| Coverage    | **CAFOs** with state operating permits must have a nutrient management plan.¹  
**Class I CAFOs** seeking coverage under an NPDES permit must have a certified nutrient management plan.²  
Permits differ based on the type of liquid waste management systems. A flow chart on the types of permits and actions that need to be taken for compliance can be found [here](#).  
Additional information must be requested prior to applying for new permits/renewing permits by contacting the [Tennessee Department of Environment & Conservation](#). |
| Content     | NMPs includes:²  
- Best management practices and procedures necessary to implement applicable effluent limitations and standards.  
- Ensures adequate storage of manure and process wastewater, including procedures for proper operation and maintenance of storage facilities.  
- Ensures proper management of mortalities.  
- Ensures that clean water is diverted from the production area.  
- Prevents direct contact of confined animals with waters of the state.  
- Identifies appropriate site-specific conservation practices to be implemented.  
- Soil testing requirements and protocols for land application of manure and process wastewater with site-specific nutrient management practices.  
- Field-specific application rates based on the linear or narrative rate approach. |
| Frequency of Updates | Permittees must review their NMP annually and update the plan whenever there have been significant changes that affect the amount of manure produced, such as the number of animals on site; changes to the land application areas; changes in how the manure is handled, stored, transferred, or land applied; or changes to how animal mortalities are handled. Changes to NMPs must be submitted to the Department, with substantial changes requiring public notice. |

¹ Note: There is not a current NPDES permit online. The permit expired in 2020. Changes to the regulations are underway based on 2018 legislation.
Nutrient Management Fact Sheet: Tennessee

**Paperwork**
NMPs must be filed with the permits. Permittees must submit annual reports. Records must be kept, including documenting the implementation and management of the minimum elements of the NMP (see sections 5.2 and 5.3).

**Planner Qualifications**
For state operating permits, NMPs can be developed by individuals with adequate knowledge of the operation including the operator.

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**Manure Storage and Application**

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<td><strong>Overview</strong></td>
<td>A <a href="#">construction general permit</a> may be needed for constructing new buildings/disturbing more than 1 acre. A fact sheet with more information can be found <a href="#">here</a>.</td>
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| **Storage**         | *[Facility Siting/Setback](#)*  
Liquid waste management systems constructed after April 13, 2006, must be located in accordance with NRCS conservation practice standard 313.                                                                 |
| **Storage Length**  | *The minimum storage period must be based on several factors, including weather, restrictions on land application times and other factors consistent with the NMP.* |
| **Application**     | *[Spreading](#)*  
Under the NMP, manure and process wastewaters shall not be applied:  
- Within 100 feet to any down-gradient surface waters, open tile intake structures, sinkholes, agricultural well heads and other conduits of water.  
  - The 100-foot setback can be substituted with a 35-foot-wide vegetated buffer or a 60-foot riparian buffer.  
- Within 100 feet of any potable well, public or private, or as recommended by the University of Tennessee Extension  
For new CAFOs located adjacent to exceptional Tennessee waters and outstanding national resource waters, a minimum 60-foot riparian buffer should be left in place. Additional buffers may be recommended based on the NRCS conservation practice standard 590.  
[Testing](#)  
Soil analysis once every five years for phosphorus content. |

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**Technical Assistance**

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<td><strong>Software Tools</strong></td>
<td>The <a href="#">Corn Nitrogen Rate Calculator</a> is an interactive computerized decision aid designed to help growers obtain a profit-maximizing nitrogen rate recommendation.</td>
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The **Fertilizer Cost Calculator** is an Excel-based calculator that will help producers evaluate the cost of applying varying fertilizer levels and various products.

**Manure Management Planner (MMP)** is a software tool created by Purdue University that includes state-specific information for Tennessee producers to create manure management plans for crop and animal feeding operations.

| Guides / Handbooks | TN NRCS nutrient management 590 standard |

**Financial Assistance**

**Summary**

TN NRCS provides assistance through:

- Environmental Quality Incentives Program (**EQIP**) - offers financial cost-share assistance to farmers for the adoption of conservation practices and development of nutrient management plans.

- Conservation Stewardship Program (**CSP**), which gives producers financial assistance to implement new conservation management practices and enhancements.

