

Updated APRIL 2021

**Disclaimer:** This document does not constitute legal advice and is intended for educational purposes only. Readers and users are solely responsible for determining, and complying with, all federal, state and local laws, ordinances and regulations.

#### Nutrient Management Plans

Topic	Summary
Coverage	CAFOs (700 dairy cows <sup>1</sup> ) subject to a <u>VPDES</u> permit are required to have a Nutrient Management Plan (NMP). <sup>2</sup>
	AFOs with 300 or more animal units (200 mature dairy cows) utilizing liquid manure collection and storage systems are subject to the <u>Virginia Pollution Abatement (VPA) permit program</u> and must have a Nutrient Management Plan (NMP).
Content	An NMP under a VPDES permit includes: <sup>3</sup>
	- Best management practices.
	<ul> <li>Procedures necessary to implement applicable effluent limitations and standards.</li> </ul>
	<ul> <li>Adequate storage of manure and process wastewater, including proper operation and maintenance.</li> </ul>
	- Proper management of mortalities.
	- Diversion of clean water from production areas, as appropriate.
	- Prevent direct contact of confined animals with surface waters of the state.
	- Appropriate testing of manure, process wastewater and soil.
	- Protocols of land application of manure.
	- Recordkeeping.
	An NMP under a VPA permit includes: <sup>4</sup>
	- Site map.
	- Site evaluation and assessment of soil types.
	- Nutrient management sampling.
	- Storage and land area requirements.
	- Calculation of waste application rates.
	- Waste application schedules.
Frequency of Updates	A VPDES permit lasts for 5 years, and reports must be filed annually.
	A VPA permit must be updated within 30 days of expansion and production
	increases that change the management of new or increased pollutants.
Paperwork	NMPs under a VPDES must be submitted to the Virginia State Water Control Board. The plan will be made available for public review.
Planner Qualifications	NMPs must be developed by a certified nutrient management planner approved by the Department of Conservation and Recreation.



### Manure Storage and Application

Manure Storage and Topic	Summary
Overview	Storage and Application requirements are included under the <u>VPA general</u> <u>permit.</u>
Storage	Facility Siting/Setback <sup>5</sup> Under the VPA permit, waste that is not stored in a waste storage facility or under a roof must be at least 100 feet from any surface water, intermittent drainage, wells, sinkholes, rock outcrops, and springs.
	Structure <sup>6</sup> Under the VPA permit, earthen waste storage facilities constructed after December 1998 must include a liner and be designed by a licensed professional engineer or NRCS employee. For waste storage or treatment facilities constructed after November 16, 2014, the facilities shall be constructed, operated and maintained in accordance with the applicable NRCS conservation practice standard.
	Storage Length <sup>7</sup> Under both permits, facilities must be designed and operated to prevent discharges in the case of a 25-year, 24-hour storm event and to provide adequate waste storage capacity to accommodate periods when the ground is frozen or saturated.
Application	<ul> <li>Spreading Under the VPDES permit, an NMP must include land application rates based on a linear approach or a narrative rate approach.  Under both permits, waste shall not be applied within the following buffer zones:  - 200 feet from occupied dwellings not on the permittee's property.  - 100 feet from water supply wells or springs.  - 100 feet (without permanent vegetation) from surface watercourses or a 35-foot vegetated buffer.  - 50 feet from a limestone outcropping.  - 25 feet from a rock outcropping.</li> </ul>
	<u>Testing</u> <sup>10</sup> Under both permits soil at the land application site should be tested once every three years and waste should be monitored ever year. Soil sampling and waste monitoring requirements, including parameters, frequency and sample type, are detailed in the VPA general permit regulations.



#### Technical Assistance

Topic	Summary
Software Tools	NutMan software is used by planners to support nutrient management planning and has "Special Conditions" documents for VPA and VPDES-permitted animal operations.  Manure Management Planner (MMP) is a software tool created by Purdue University that includes state-specific information for Virginia producers to create manure management plans for crop and animal feeding operations.
Guides / Handbooks	VA Cooperative Extension offers two informational articles for producers interested in manure and nutrient management:  - Manure Management and Environmental Stewardship.  - Nutrient Management for Small Farms.  Virginia Department of Conservation and Recreation (DCR) provides a wide range of Nutrient Management Planner Resources, from presentations to NMP guidance documents.
Classes / Trainings	VA DCR administers the <u>Nutrient Management Planner Training and</u> <u>Certification Program</u> with training sessions and examinations every six months.
Tailored Expert Assistance	<ul> <li>VA DCR assists through:         <ul> <li>Their <u>Nutrient Management specialists</u> can assist farmers in writing NMPs in their service regions.</li> <li>A <u>directory</u> of VA Certified Nutrient Management Planners and businesses employing certified planners.</li> <li>A <u>registry</u> of Certified VA Resource Management Plan Developers to address onsite erosion issues and include recommendations for nutrient management.</li> </ul> </li> </ul>

#### Financial Assistance

#### Summary

### VA DCR offers:

- An <u>Agricultural BMP Tax Credit Program</u> where producers with a conservation plan approved by their SWCD may take a credit against state income tax of 25% of the first \$100,000 of actual out-of-pocket expenses for agricultural BMPs. A tax credit for conservation tillage equipment is also offered.
- A <u>tax credit for precision agriculture equipment</u> for farmers to use conservation equipment, including pneumatic fertilizer applicators, monitors and flow regulators, and manure applicators.



- An <u>Agricultural NMP Cost-Share program</u> for more than 70 conservation practices covering the full spectrum of agricultural operations, including nutrient management.

#### VANRCS provides assistance through:

- Environmental Quality Incentives Program (<u>EQIP</u>) offers financial cost-share assistance to farmers for the adoption of conservation practices and development of nutrient management plans.
- Conservation Stewardship Program (<u>CSP</u>), which gives producers financial assistance to implement new conservation management practices and enhancements.

<sup>&</sup>lt;sup>1</sup> <u>9VAC25-31-10. Definitions. (virginia.gov)</u>

<sup>&</sup>lt;sup>2</sup> 9VAC25-31-130. Concentrated animal feeding operations. (virginia.gov)

<sup>&</sup>lt;sup>3</sup> 9VAC25-31-200. Additional conditions applicable to specified categories of VPDES permits. (virginia.gov)

<sup>&</sup>lt;sup>4</sup> <u>9VAC25-192-70. Contents of the general permit. (virginia.gov)</u>

<sup>&</sup>lt;sup>5</sup> https://law.lis.virginia.gov/admincode/title9/agency25/chapter191/section50/

<sup>&</sup>lt;sup>6</sup> <u>9VAC25-192-70. Contents of the general permit. (virginia.gov)</u>

<sup>&</sup>lt;sup>7</sup> 9VAC25-192-70. Contents of the general permit. (virginia.gov)

<sup>&</sup>lt;sup>8</sup> 9VAC25-31-200. Additional conditions applicable to specified categories of VPDES permits. (virginia.gov)

<sup>9</sup> https://law.lis.virginia.gov/admincode/title9/agency25/chapter191/section50/, https://law.lis.virginia.gov/admincode/title9/agency25/chapter192/section70/

<sup>&</sup>lt;sup>10</sup> 9VAC25-192-70. Contents of the general permit. (virginia.gov)