



# Nutrient Management Fact Sheet: Vermont

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## Nutrient Management Plans

Topic	Summary
Coverage	<p><a href="#">Nutrient Management Plans</a> are required for <a href="#">Certified Small Farm Operations (CSFO)</a><sup>1</sup>, permitted <a href="#">Medium</a><sup>2</sup> (MFO) and <a href="#">Large</a><sup>3</sup> Farm Operations (LFO) managing manure, agricultural wastes, or fertilizer for use as nutrient sources. <a href="#">Small farms</a> that are not CSFOs must still follow Vermont's Required Agricultural Practices (RAPs).</p> <p>A chart for determining if small farms need to be certified can be found <a href="#">here</a>.</p> <p>Information on NPDES general permits for Medium CAFOs can be found <a href="#">here</a>. CAFOs must develop a Nutrient Management Plan based on the Vermont NRCS 590 Practice Standard as a part of the general permit. Large and small farms requiring a permit must apply for an individual permit.<sup>a</sup></p>
Content	<p>The <a href="#">NRCS Nutrient Management Practice Code 590<sup>b</sup></a> meets the <a href="#">CSFO</a>, <a href="#">MFO</a> and <a href="#">LFO</a> and NPDES general permit regulatory requirements. Components include:</p> <ul style="list-style-type: none"> <li>- Field maps and land base.</li> <li>- Soil and tissue sampling and testing.</li> <li>- Manure sampling and adequate storage.</li> <li>- Management of production area.</li> <li>- Nutrient application rates.</li> <li>- Soil health management.</li> <li>- Groundwater requirements.</li> <li>- Recordkeeping.</li> </ul> <p>Additional details on the components of an NMP can be found <a href="#">here</a>.</p>
Frequency of Updates	<p>NMPs must be updated in a timely manner following significant changes in animal numbers, management, nutrient application rates, etc. <sup>4</sup></p>
Paperwork	<p>The following <a href="#">records</a> of manure or other agricultural waste application shall be maintained by all farms for a period of five years and shall be provided to the Secretary upon request:</p> <ol style="list-style-type: none"> <li>(1) date of application;</li> <li>(2) field location;</li> <li>(3) application rate;</li> <li>(4) source of nutrients applied; and</li> </ol>

<sup>a</sup> Note: there are no [NPDES permitted CAFOs](#) in Vermont.

<sup>b</sup> Note: this is the version of the VT NRCS 590 Practice Code from the Vermont Agency of Agriculture, Food & Markets website, however a more recent version is available [here](#).



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	<p>(5) weather and field conditions at the time of application.</p> <p><a href="#">MFOs</a> and <a href="#">LFOs</a> must submit annual compliance reports, including information about the NMP. <a href="#">CSFOs</a> must submit an annual certification form.</p> <p>As part of a NPDES permit application, the NMP must be filed with the Vermont Agency of Natural Resources. Information, including the NMP, must be posted for 30 days in the municipality in which the discharge is located. Additionally, the Department will post the NMP online with the opportunity for public comment.<sup>5</sup></p>
Planner Qualifications	<p>NMPs can be developed by a certified nutrient management <a href="#">planner or the permittee</a>. NMPs must meet the standards set by VT Required Agricultural Practices and the USDA NRCS. Only professionals registered with NRCS have the authority to certify that an NMP meets these standards.</p> <p>NPDES permits require the use of a certified planner to develop, modify, review and/or approve the NMP.</p>

### Manure Storage and Application

Topic	Summary
Overview	<p>All farms meeting the <a href="#">definitions</a> (50 dairy cows or more) must comply with the <a href="#">Required Agriculture Practices Rule</a> (RAP).</p> <p>Certified small farming operations, medium and large farming operations are required to have water quality training every five years. Additional information can be found <a href="#">here</a>.</p> <p>Custom applicators of manure must be certified. Information on the requirements and certified applicators can be found <a href="#">here</a>.</p> <p>Additional requirements for subsurface tile drainage can be found <a href="#">here</a>.</p>
Storage	<p><a href="#">Facility Siting/Setback</a><sup>6</sup></p> <p>Under the <a href="#">RAP</a>, new waste storage facilities must be located:</p> <ul style="list-style-type: none"> <li>- 100 feet from public roads and property lines.</li> <li>- 200 feet from wells and surface water.</li> </ul> <p>Under the <a href="#">RAP</a>, new farm structures must be at least 50 feet from the bank of surface waters.</p> <p>Under the <a href="#">RAP</a>, manure stacking setback requirements:</p> <ul style="list-style-type: none"> <li>- 100 feet from a property line and a ditch.</li> <li>- 200 feet from wells and surface water.</li> </ul>



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### Structure

Under the [RAP](#), waste storage facilities constructed, expanded or modified after July 1, 2006, must be designed and constructed to the USDA NRCS standards or equivalent.

LFO design standards can be found [here](#) (subchapter 6).

MFO storage requirements can be found on page 10 of the [NPDES general permit](#) and page 12 of the [MFO regulations](#).

[Permits](#) for the construction of [farm structures](#) may be needed in flood and river corridor areas.

For facility and application setbacks, a fact sheet on the difference between a ditch and surface water can be found [here](#).

### Application

### Spreading

Under the [RAP](#), all farms must account for nutrient application rates and keep records of the date, field and application rates, including the source of nutrients and weather and field conditions. Manure and other agricultural wastes cannot be applied:

- To land subject to frequent flooding after October 16 or before April 14
- between December 15 and April 1.
- To ground that is frozen or snow-covered (unless approved exemption).
- Cropland where the average field slope exceeds 10% (unless there is a permanently vegetated buffer of 100 feet).
- When field conditions are conducive to flooding or other off-site movements (regardless of NMP recommendations).
- To exposed bedrock.
- Within 100 feet of a private water supply.
- Within 200 feet of a public water supply.

Additional requirements include a perennial vegetated buffer setback for manure application with no compost or fertilizer applied:

- 10 feet from ditches.
- 25 feet from surface water and inlets.

### Incorporation

Under the [RAP](#), manure and other agricultural wastes must be injected or incorporated within 48 hours of application unless applied to land in no-till management.

### Testing

Under the [RAP](#), soil sampling must be conducted every five years.



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Under the [LFO](#) and [MFO](#) regulation, fields receiving a mechanical application of nutrients shall have the soil tested every three years.

### Technical Assistance

Topic	Summary
Software Tools	<p><a href="#">Manure Management Planner (MMP)</a> is a software tool created by Purdue University that includes state-specific information for Vermont producers to create manure management plans for crop and animal feeding operations.</p> <p>The <a href="#">Vermont Phosphorus Index</a> is a tool developed to assess phosphorus runoff potential from individual fields based on soil and field, which can be used to prioritize fields for nutrient and soil management practices.</p> <p><a href="#">goCrop</a> is an online software tool, created by the University of Vermont Extension, used to create an NMP on a mobile phone or smart tablet.</p> <p>The <a href="#">Natural Resources Atlas</a> is an online mapping tool for Vermont's Natural Resources with over 150 map layers available to make a custom map across all VT departments and other state and municipal agencies.</p>
Guides / Handbooks	<p>VT NRCS <a href="#">590 nutrient management practice standard</a>.</p>
Classes / Trainings	<p>UVM Extension holds <a href="#">Nutrient Management Planning (NMP)</a> classes where each class includes a 30-minute lecture and then NMP work.</p> <p>The State of Vermont Agency of Agriculture, Food and Markets (VAAFAM) provides certification programs to become a <a href="#">Custom Manure Applicator</a>.</p>
Tailored Expert Assistance	<p>VAAFAM offers the following <a href="#">technical assistance</a>:</p> <ul style="list-style-type: none"> <li>- The Farmstead Best Management Practices (BMP) Program provides engineering services on a priority basis for the design of BMPs at no cost to the farmer (including practices used in establishing NMPs like manure storage and barnyard runoff collection systems.)</li> <li>- The Technical Assistance Program offers agricultural engineering and design services and water quality compliance, state permitting, and state variance consultation to implement structural water quality improvements.</li> </ul>

### Financial Assistance

#### Summary

VT NRCS helps 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.



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

VAAFM offers the following financial assistance:

- [Farmstead Best Management Practices \(BMP\) Program](#)- farmers can receive grants for implementing water quality improvement projects, including practices used in establishing NMPs like manure storage and barnyard runoff collection systems.
  - o This is also available to custom applicators, nonprofit organizations, and phosphorus separation equipment providers.
  - o Applicants are limited to one application per individual farm operation, organization, or entity.
- [Capital Equipment Assistance Program \(CEAP\)](#)- cost-share funding for new or innovative equipment that will reduce surface runoff of agricultural wastes to State waters, separate phosphorus from manure, and reduce farmers' costs when they apply manure or implement an NMP.

[Water Quality Grants](#) are dispersed from the Vermont Housing & Conservation Board for producers looking to making long-term investments in water quality. Producers beginning NMP design can use these funds to construct or upgrade manure pits, barns or barnyard construction to reduce barnyard runoff.

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<sup>1</sup> <https://legislature.vermont.gov/statutes/section/06/215/04871>

<sup>2</sup> <https://legislature.vermont.gov/statutes/section/06/215/04858>

<sup>3</sup> <https://legislature.vermont.gov/statutes/section/06/215/04851>

<sup>4</sup> [https://agriculture.vermont.gov/sites/agriculture/files/documents/RAPFINALRULE12-21-2018\\_WEB.pdf](https://agriculture.vermont.gov/sites/agriculture/files/documents/RAPFINALRULE12-21-2018_WEB.pdf)

<sup>5</sup> [https://dec.vermont.gov/sites/dec/files/wsm/stormwater/docs/Agriculture/sw\\_finalsignedGP.pdf](https://dec.vermont.gov/sites/dec/files/wsm/stormwater/docs/Agriculture/sw_finalsignedGP.pdf)

<sup>6</sup> [RAPFINALRULE12-21-2018\\_WEB.pdf \(vermont.gov\)](#)