



Nutrient Management Fact Sheet: Michigan

Updated JANUARY 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	<p>CAFOs (700 mature dairy cows) regulated under the National Pollutant Discharge Elimination System permits are required to develop a Nutrient Management Plan.</p> <p>Michigan's voluntary Michigan Agriculture Environmental Assurance Program (MEAP) and generally accepted agricultural and management practices (GAAMPs) also cover nutrient management topics.</p>
Content	<p>Michigan NPDES Permit requires a Comprehensive Nutrient Management Plan addressing:</p> <ul style="list-style-type: none"> - Waste Storage Structures (detailed below). - Best Management Practices. - Land Application (detailed below).
Frequency of Updates	Under the NPDES permit, the CNMP should be reviewed annually and updated, as necessary. Annual reports are also required.
Paperwork	The CNMP must be submitted as part of the permit application.
Planner Qualifications	CNMPs must be approved by a certified CNMP provider.

Manure Storage and Application

Topic	Summary
Overview	The NPDES permit specifies volume design requirements for storage structure, design and construction requirements, inspection requirements, operation and maintenance.
Storage	<p>Structure</p> <p>New storage structures shall be constructed in accordance with NRCS practice standard 313 (2017). Existing storage structures must be documented as equivalent to NRCS practice standard 313 (2014). Page 9 of the permit includes additional requirements for waste storage structures.</p> <p>Storage Length</p> <p>Waste storage Structures must be designed to contain all waste generated on the operation for 6 months or longer. Additional details can be found on page 7 of the permit.</p>
Application	Spreading



Nutrient Management Fact Sheet: Michigan

- Land Application requirements are outlined on page 13 of the [permit](#). The requirements include:
- Field by field assessments.
 - Field inspections.
 - Maximum annual land application rates.
 - Land application log.
 - Land application summary.
 - Method of application.
 - Restrictions on certain land application including prohibition of application during January, February or March unless certain conditions are met.
 - Setbacks
 - o No waste application within 100 feet of any surface water of the state, open tile line intake, sinkholes and agricultural well heads.
 - o No waste application within a 35-foot-wide vegetated buffer along any surface water of the state, open tile line intake, sinkhole and agricultural well head.

Incorporation

Waste shall be subsurface injected or incorporated into the soil within 24 hours of application. Waste can be applied to crops if it will not enter surface waters of the state. Exceptions and additional requirements related to frozen or snow-covered ground can be found on page 20 of the [permit](#).

Testing

Soil and land application sites must be sampled once every three years.

Technical Assistance

Topic	Summary
Software Tools	<p>Michigan State University (MSU) offers the following resources:</p> <ul style="list-style-type: none"> - The Institute of Water Research’s Computer-Assisted Nutrient Management Planning Program CANMaPP tool is a free, online recordkeeping program for nutrient management planning that allows users to document, store, review, and update their farms’ nutrient management practices. - EnviroImpact Tool is an online tool that provides maps showing short-term runoff risks for daily manure application planning purposes—taking into account factors such as precipitation, temperature, soil moisture and landscape characteristics. <p>Manure Management Planner (MMP) is a software tool created by Purdue University that includes state-specific information for Michigan producers to create manure management plans for crop and animal feeding operations.</p>
Guides / Handbooks	Michigan Department of Agriculture and Rural Development (MDARD) provides information on:



Nutrient Management Fact Sheet: Michigan

	<ul style="list-style-type: none"> - Michigan Agriculture Environmental Assurance Program (MAEAP) (a voluntary program that gives state assistance on pollution prevention practices): <ul style="list-style-type: none"> - Livestock System verification includes developing a CNMP. - Information on MAEAP Livestock Standards here. - Right to Farm and Generally Accepted Agricultural and Management Practices for Manure Management and Utilization. <p>Additional information on MAEAP can be found here.</p> <p>MSU Extension provides:</p> <ul style="list-style-type: none"> - An informational brochure explaining Comprehensive Nutrient Management Plans (CNMP). - A dairy program webpage providing news and other resources, including a newsletter. - Information on site selection for new and expanding livestock operations. <p><i>Note: Due to the complexity of these CNMPs, producers should consult a certified nutrient management planner.</i></p>
Classes / Trainings	<p>MDARD hosts educational sessions across the state and virtually to introduce farmers to MAEAP and update them on new and emerging regulations and opportunities affecting agriculture.</p> <p>MSU Extension’s dairy program webpage is routinely updated with free classes and events available for dairy producers to attend.</p>
Tailored Expert Assistance	<p>MSU Extension’s dairy program webpage provides producers with access to dairy experts and advisors; producers can view a list of MSU Extension dairy specialists here.</p>

Financial Assistance

Summary

Michigan 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.
 - o Contact a [local field office](#) for more information and an additional step-by-step guide is available [here](#).
 - o The Great Lakes Restoration Initiative ([GLRI](#)) is a regional EQIP initiative that provides support for practices including livestock waste storage and nutrient management.
- [Conservation Stewardship Program \(CSP\)](#), which gives producers financial assistance to implement new conservation management practices and enhancements.