

**Permit No. MIG010000**

## **FACT SHEET**

### GENERAL PERMIT PROCEDURES AND DESCRIPTION OF CONCENTRATED ANIMAL FEEDING OPERATIONS (CAFO):

General permits are issued in accordance with Rule 2191 of the Part 21 Rules of Part 31, Water Resources Protection, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA). This permit sets forth the limitations, monitoring requirements, and other conditions necessary to operate a concentrated animal feeding operation (CAFO). Discharges that may cause or contribute to a violation of a water quality standard are not authorized by this permit.

The applicability of this permit shall be limited to CAFOs that have been determined by the Michigan Department of Environment, Great Lakes, and Energy (Department) not to need an individual NPDES Permit. Upon receipt by the Department of a complete National Pollutant Discharge Elimination System permit application to operate a CAFO from an applicant, the Department may issue a Certificate of Coverage (COC) to an individual facility. In order to constitute a valid authorization to operate a CAFO, this permit must be complemented by a COC issued by the Department.

### BASIS FOR CONCENTRATED ANIMAL FEEDING OPERATION PROGRAM:

The Part 21 Rules (R 323.2196) of the Michigan Administrative Code established standards for the operation of CAFOs. The standards for CAFOs consist of general requirements, monitoring, effluent limitations, best management practices, technical operational standards, notification, and recordkeeping. The Part 21 Rules apply to any facility that operates a CAFO. The Part 21 Rules are designed to protect public health and the environment from any reasonably anticipated adverse effects of certain pollutants and contaminants that result in the operation of a CAFO. The Part 21 Rules are consistent with federal regulations under Title 40 of the Code of Federal Regulations (CFR), Part 122.23, Concentrated Animal feeding Operations.

### PROPOSED REVISIONS TO THE GENERAL PERMIT:

Permit language has been revised to incorporate updated references and terminology, and to provide clarifications and consistency. In addition, revisions to this permit are being proposed in the following areas: (1) Land Application of CAFO Waste, (2) Comprehensive Nutrient Management Plans (CNMP), (3) Manifesting of CAFO waste, (4) Storage Structures, (5) Magnitude of Rainfall Events, (6) Monitoring of Discharges, (7) Prohibitions, and (8) changes to address comments from the United States Environmental Protection Agency (USEPA). The revisions are summarized below:

(1) Land Application of CAFO Waste

- a) The permit now requires field location information to include section, township, county, crossroads, latitude and longitude of field center; allowing the Department and the permittee to be consistent in identifying fields.
- b) The Department has developed specific forms for the permittee to use for consistency and efficiency of permit reporting.
- c) The permit now requires the use of the Bray P1 or the Michigan Phosphorus Risk Assessment (MPRA) for 12 months after the effective date of the Certificate of Coverage (COC). After 12 months the use of MPRA is required. The requirement is intended to address the sources and transport of nutrients from CAFO waste, while providing more robust protection of water quality. The MPRA in this permit is based on the tool developed according to the “Michigan Phosphorus Risk Assessment, (Phosphorus Index, Version 2) Date: August 2007 (REV January 2014)” by the Natural Resources Conservation Service (NRCS).
- d) The Department has modified the MRPA tool to include a prohibition of land application on soils at or above 150 parts per million (ppm) phosphorus, requires setbacks of manure application from surface waters of the state, and maintains specific prohibitions and restrictions for time for incorporation or injection of CAFO waste.
- e) The permit now requires permittees with production areas or fields in their CNMP in watersheds with an approved Total Maximum Daily Load (TMDL) for *Escherichia coli* (*E. coli*), Biota, and/or Dissolved Oxygen to have additional requirements. The Department has developed the “Total Maximum Daily Load (TMDL) Guidance for Concentrated Animal Feeding Operations (CAFO)” for the evaluation of CAFO operations to determine additional pollutant control measures. Evaluations shall be submitted to the Department for approval.
- f) The permit now specifies risk assessment requirements to protect water quality and watersheds with approved nutrient (nitrogen or phosphorus) TMDLs. Permittees with production areas or fields in their CNMP in watersheds with an approved nitrogen or phosphorus TMDL, may only apply on those fields in the watershed when the MPRA score is LOW.
- g) Permittees are now required to submit quarterly summaries of land applications conducted by the permittee or manifested from the permittee. Previously, documentation was kept at the facility and available to the Department during site visits. Increased reporting provides a more recent time period to review records and if needed, respond to concerns. In addition, quarterly summaries will be available to the public via MiWaters.
- h) The weather forecast model has been updated to include the Q12 (indicating a 12-hour forecast) in addition to the Q24 (indicating a 24-hour forecast). The previous permit only included Q24. The addition of Q12 will capture rain events in a more immediate time period.
- i) The permit does not require incorporation of waste within 24 hours on cover crops. Previously, the permit required incorporation within 24 hours. Cover crops may provide added protection of water quality by stabilizing otherwise bare soils and by the additional uptake of nutrients. The permit now requires that the land application of CAFO waste applied on wheat stubble to be incorporated within 24 hours (unless applied on a no-till field)

(2) Comprehensive Nutrient Management Plans (CNMP)

- a) Comprehensive Nutrient Management Plans (CNMPs) are now required to be developed, not just approved, by a CNMP provider. This will result in plans that sufficiently address permit requirements and provide more consistency in CNMP submittals.
- b) The Significant Revisions of the CNMP has been updated to reflect federal requirements of 40 CFR, Part 122.23. All Significant Revisions to the CNMP are required to be public noticed for a 15-day period. The permit has deleted the changes in the number of acres as a Significant Revision. Previously, changes in the number of acres was a Significant Revision to the CNMP. This permit requires site-specific controls which are more protective of water quality.

(3) Manifesting of CAFO Waste

- a) The permit now requires permittees to submit quarterly summaries of land applications of manifested waste. Previously, land application records of manifested waste were kept at the facility and available to the Department during site visits. Increased reporting provides a more recent time period to review records and if needed, respond to concerns. In addition, quarterly summaries will be available to the public via MiWaters.
- b) The permit now requires the generator to obtain soil tests (within the last three years) from recipients of manifested CAFO waste prior to land application. Previously, this information was not required. This provides the generator knowledge if the recipient fields can accept the CAFO waste.
- c) The winter months are a high-risk period for discharges from land application of CAFO waste. The permit now prohibits manifesting of CAFO waste during January, February, or March. Previously the permit allowed for manifesting during January, February, and March under certain conditions. As permittees are required to have 6 months of waste storage capacity, they should not need to manifest in these months.

(4) Storage Structure:

- a) The permit now references the most recent revision to the Natural Resources Conservation Service 313 Standard (NRCS 313 2017) .
- b) The waste storage structure requirements are clarified to address liquid waste and solid stackable waste. The permit identifies requirements and reporting to address the operations and management of the appropriate structure and waste type.
- c) The permit now includes a requirement to include a value for residual solids in volume design. Previously, this was not specified. This value may impact the storage capacity volume and time to be considered in design and operations.
- d) Permittees are now required to have 6-months of waste storage capacity to meet NRCS 313, 2017 at COC issuance. Previously, permittees were provided a timeframe to develop 6-month capacity to meet NRCS 313, 2017. A permitted facility is allowed a timeframe only when procuring an existing structure.
- e) The permit now includes design criteria for waste storage structures for solid stackable manure subject to precipitation and those not subject to precipitation. This provided the permittee and Department staff a consistent review of design, construction, operation and maintenance of these structures.
- f) The permit now requires the permittee to certify that between November 1 to December 31 of each year, they have six months of waste storage capacity. This certification provides an increased awareness of the storage capacity of CAFO waste related to prohibitions regarding land application and manifesting.
- g) The permit has been updated to clarify that CAFO waste storage structures may not contain human sanitary waste or mortalities (including animal refuse or parts other than excrement).

(5) Magnitude of Rainfall Events

The permit now references the National Oceanic and Atmospheric Administration (NOAA) Atlas-14 Precipitation Frequency Data Server. Previously, the permit referenced the "Rainfall Frequency Atlas of the Midwest," Huff and Angel, Illinois State Water Survey, Champaign, Bulletin 71, 1992. The NOAA Atlas -14 Precipitation Frequency Data Server provides an updated and more accurate forecasting model.

(6) Monitoring of Discharges:

The permit now requires authorized and unauthorized discharges be monitored, sampled and reported to the Department via MiWaters in a manner consistent with the other NPDES programs. It further requires specific methods and time frames for actions such as sampling and reporting. Previously, the permittee was only required to report volumes and visual observations of overflow or discharges. This update will provide more water quality data and information about potential impacts to waters of the state.

(7) Prohibitions

- a) The permit now prohibits application of CAFO waste during January, February, or March 1-19 that are under the control of the CAFO operator.
- b) CAFO waste application by the CAFO operator from March 20-31 must include notification to the Department, cannot be on ground that is frozen or snow-covered, and must follow all the land application requirements in the permit.
- c) The permit now prohibits manifesting of waste during January, February, or March. These prohibitions reflect the increased risk of runoff from land applications of CAFO waste during these months. As permittees must certify that the CAFO has 6 months of waste storage capacity, the facility now has adequate storage volume to refrain from land applications during this time period. The state acknowledges that there may be times during these months that the land may be suitable for receiving incorporated waste and therefore, allows for the opportunity to land apply from March 20-31.

(8) Changes to Address Comments from the USEPA

- a) The permit has been updated to include a location for record storage and/or submittal; it further specifies that records shall be kept for a minimum of 5 years from the date of creation.
- b) The permit now requires all Significant Revisions to the CNMP to be public noticed in MiWaters for a 15-day period.
- c) The permit now includes new sand bedding in the definition of the production area raw materials.
- d) The permit has been updated to specify that direct precipitation also be included in the emergency volume design of the CAFO waste storage structure.
- e) The permit has been updated to clarify that the methodology and calculations show the actual amounts of nitrogen and phosphorus applied for the Previous Crop Year.
- f) The permit has been updated to include the clarification that Certificates of Coverage must be public noticed.
- g) The permit cover sheet has been updated to clarify that egg washing and egg processing facilities, and duck CAFO facilities are not authorized for coverage under the NPDES General Permit. These facility types will require coverage under an individual NPDES permit.

ADDITIONAL INFORMATION:

The draft permit requires that reporting be submitted via the Department's MiWaters system in accordance with Part II.C.2. of General Permit MIG010000. Reporting shall be submitted to the MiWaters system located at <https://miwaters.deq.state.mi.us>.

PUBLIC COMMENT

Comments or objections to the draft permit received between October 30, 2019 and December 18, 2019, will be considered in the final decision to issue this General Permit.

Three public hearings will be held, and a public notice of the hearings will be provided at least thirty (30) days in advance. The Department will consider comments made at the hearings when making its final determinations on this permit. Further information regarding the draft General Permit and procedures for commenting may be obtained by contacting Megan McMahon, , Michigan Department of Environment, Great Lakes, and Energy, Permits Section, Water Resources Division, P.O. Box 30458, Lansing, Michigan 48909-7958, telephone: 517-230-3442, e-mail: [mcmahonm1@michigan.gov](mailto:mcmahonm1@michigan.gov).