

**Michigan Department of Environmental Quality
Water Bureau**

**Technical Standard for the Surface Application of
Concentrated Animal Feeding Operations Waste on Frozen or Snow-Covered Ground
Without Incorporation or Injection**

When Concentrated Animal Feeding Operation (CAFO) waste is surface-applied to frozen or snow-covered ground, without incorporation or injection, and that application is followed by rainfall or temperatures rising above freezing, the CAFO waste can run off into lakes, streams, or drains. Documented evidence shows that this runoff can cause resource damage to the surface waters of the state. Therefore, in accordance with Title 40 of the Code of Federal Regulations, Section 123.36, Establishment of Technical Standards for Concentrated Animal Feeding Operations, and State Rule 323.2196(5), CAFO Permits, of the Part 21 Rules, Wastewater Discharge Permits, promulgated under Part 31, Water Resources Protection, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, the Michigan Department of Environmental Quality, Water Bureau, establishes the following Technical Standard. This Technical Standard shall be used for field-by-field assessments, as required by National Pollutant Discharge Elimination System permits issued to CAFOs, to assure that the land application of CAFO waste to frozen or snow-covered ground, without incorporation or injection, will not result in CAFO waste entering the waters of the state.

Based on the frozen and/or snow-covered conditions, the minimal settling and breaking down of the waste during these conditions, and the inability to predict or control snowmelt and rainfall, there are no practices that can ensure the runoff from fields with surface-applied waste on frozen or snow-covered ground will not be polluted. This standard assumes that surface runoff from snowmelt and/or rainfall will occur, and that the runoff will be polluted if CAFO waste is surface-applied on frozen or snow-covered ground. Therefore, the way to prevent these discharges is to apply CAFO waste only to fields, or portions of fields, where the runoff will not reach surface waters.

A field-by-field assessment must be completed, and all of the following requirements must be met and documented:

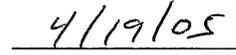
1. The Natural Resources Conservation Service's Manure Application Risk Index (MARI)* has been completed to identify fields, or portions of fields, that scored 37 or lower on the MARI.
2. An on-site field inspection of the entire field, or portion of field, that scored 37 or lower under the MARI has been completed. The inspection will take into consideration the slope and location of surface waters, tile line risers, and other conduits to surface water.
3. Based on the on-site field inspection, the Comprehensive Nutrient Management Plan (CNMP) will include documentation on topographic maps, the fields or portions of fields where the runoff will not flow to surface waters, and designate those areas as the only areas authorized for surface application without incorporation to frozen or snow-covered ground.
4. The findings of the inspection and documentation in the CNMP will be approved by a certified CNMP provider.

This assessment must be incorporated into the CNMP, and submitted as part of the CNMP Executive Summary each year.

* Grigar, J., and Lemunyon, J. A Procedure for Determining the Land Available for Winter Spreading of Manure in Michigan. NRCS publication. (Available on the MDEQ NPDES website)

A handwritten signature in cursive script, appearing to read "Richard A. Powers", is written above a horizontal line.

Richard A. Powers, Chief
Water Bureau

A handwritten date "4/19/05" is written above a horizontal line.

Date