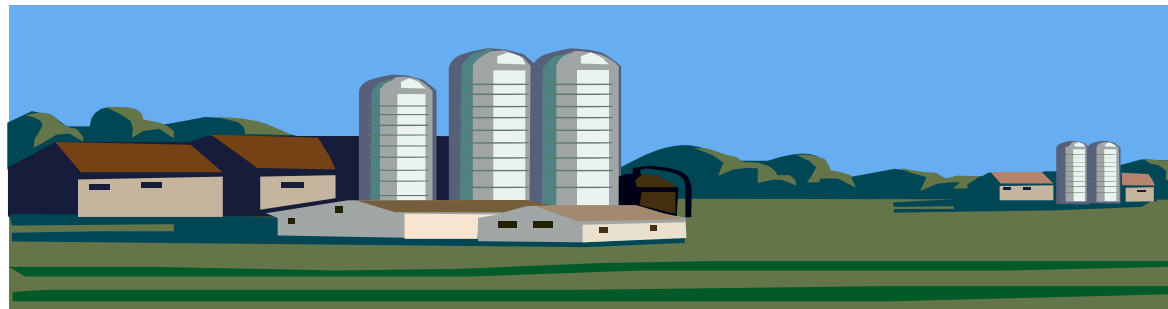


CAFO Regulations in Michigan



Jerrod Sanders – MDEQ Water
Bureau



Authority for CAFO NPDES permitting

Part 31 Water Resources Protection
of the Natural Resources and
Environmental Protection Act 1994, as
amended (NREPA)

Part 21 Wastewater Discharge Permits
(promulgated under Part 31 of NREPA)



What is a Concentrated Animal Feeding Operation (CAFO)?

- An Animal Feeding Operation (AFO) that is required to have an NPDES Permit.
 - AFO: lot or facility where animals (other than aquatic) are stabled or confined for 45 days in any 12 month period and vegetation is not sustained over any portion of lot or facility.
- Generally includes the common types of animal agriculture operations in Michigan.



What makes an AFO a CAFO?

Three ways (Part 21):

1. Exceed a particular number of animals (Large CAFO)
2. Discharge pollutants from the production area (Medium CAFO)
3. Be designated by DEQ as a “significant contributor” (Small and Medium CAFOs)



Large CAFOs meet or exceed any of these numbers:

- 700 mature dairy cows
- 1000 veal calves
- 1000 other cattle
- 2,500 swine over 55 lbs
- 10,000 swine under 55 lbs
- 500 horses
- 10,000 sheep/lambs
- 55,000 turkeys
- 30,000 laying hens/broilers (liquid manure handling)
- 82,000 laying hens
- 125,000 other chickens
- 30,000 ducks
- 5,000 ducks (liquid manure handling)



CAFO Regulations Timeline:

- 1972 *Federal Water Pollution Control Act Amendments of 1972. AKA "Clean Water Act" - created permitting for point sources (NPDES)*
- 1976 *Rules Promulgated under the CWA identify which operations constituted a point source - "CAFO"*
- 2002 MDEQ issued first CAFO general permit (MIG440000)
- 2002 Environmental Council of States (ECOS) agreement. Michigan Agricultural Environmental Assurance Program (MAEAP) becomes a voluntary alternative to permitting
- 2003 *New EPA Rules on CAFOs issued*
- 2004 Second general permit (MIG010000) for new large CAFOs
- 2005 Revised Mich. Rules (Part 21) for CAFOs become effective
- 2005 Third general permit (MIG0190000) for large CAFOs was issued to meet requirements of new Michigan rule
- 2007 (December 31) ECOS Agreement expires. All Michigan CAFOs required to have permit coverage



CAFOs in Michigan (October '08)

- 206 total known CAFOs
- 178 CAFOs permitted
- 12 No Potential to Discharge Determinations
- 2 No application submitted
- 14 New applications in processing



Permitting Options

1. General Permit (MIG0190000 - Expires 2010)
2. Individual Permit (Issued for 5 years)
 - Required for:
 - New Facilities 2 times the Large CAFO numbers
 - Expanding Facilities 3.5 times the Large CAFO numbers
 - Can be tailored to specific practices
3. No Potential to Discharge
 - Cannot have potential to discharge under any climatic condition



MIG0190000 Requirements

1. Comprehensive Nutrient Management Plan (CNMP)
2. “Production Area”
 - a) Construction standards
 - b) Operation and Maintenance Requirements
3. Land Applications
4. Record Keeping and Reporting
5. Cannot have discharges which cause or contribute to violations of water quality standards



Production Area

- Collect all “production area waste”
- Store “production area waste” in a storage structure which meets NRCS 313 Standard or “equivalent environmental performance”
- Must have 6 months of storage capacity
- Divert clean water
- No livestock contact with Waters of the State
- Inspections: Storage structures, transfer structures and equipment, and water lines



Land Applications

- Agronomic Rates based on soil testing and P levels
- Incorporation within 24 hours (limited exceptions)
- Setbacks from surface waters (100' or 35')
- Weather forecasting (< 70% chance of ½ inch)
- No spreading during rain or on saturated soils
- Winter Spreading Standards
- Manifesting
- Inspections: Spreading equipment, field conditions, and tile lines before and after spreading



Record Keeping and Reporting

- Keep records of all inspections, sampling, land applications, manifests, and corrective actions
- Some records are retained at the farm, many are compiled and submitted to DEQ April 1 of each year in an Annual Report
- Report discharges (verbal 6hrs, written report 5 days)
- Report permit non-compliance (5 days)

Modern Dairy CAFO



An aerial photograph of a large-scale swine confinement animal farming operation (CAFO). The facility consists of two long, parallel, green-roofed buildings, each approximately 1.5 kilometers in length. These buildings are situated on a dirt road that curves through a landscape of green fields and brown, tilled soil. Several large, cylindrical metal silos are positioned along the length of the buildings. The surrounding area includes a dense line of trees on the left and a large, open field of brown earth on the right, suggesting a rural or agricultural setting. The text "Modern Swine CAFO" is overlaid in the center of the image.

Modern Swine CAFO

Modern Poultry CAFO





MDEQ CAFO Program

Questions?

More Information:

- http://www.michigan.gov/deq/0,1607,7-135-3313_3682_3713-96774--,00.html
- Google "Michigan DEQ CAFO"
- Jerrod Sanders 269/567-3579