Developing Odor Management Plans

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Writing Odor Management Plans

• Template for writing OMP
  • First review components of OMP
  • Second webinar introduce and review the OMP template

Odor Management Plan Template

• Resources:
  • Michigan Agriculture Environmental Assurance Program (MAEAP)
    Progressive Planning Fact Sheet
    "Odor Management Plan" available:
  • Michigan Dept of Agriculture and Rural Development (MDARD)
    Site Selection GAAMPS - Appendix B
    "Example Odor Management Plan" available:
  • University of Minnesota bulletin
    "Preparing an Odor Management Plan" available:
    http://www.extension.umn.edu/distribution/livestocksystems/976/73.html

Why an OMP

Odors are a natural factor of livestock production
All livestock farms have some level of odor
Three basic reasons why farmers write OMPs

• Farm may be taking proactive approach
  ➢ Document current odor control measures
  ➢ Consider optional odor technologies
• In response to formal odor complaint
• Part of the plans for new or expanded facilities
Writing an OMP

Five factors to consider when writing an OMP

- Identify all odor sources on the farm
- Determine the magnitude of odor from each source
- Identify current and potential odor control technologies
- Develop a plan for monitoring odor
- Establish a plan for maintaining a positive image throughout the community

Farm odor sources

- Animal housing
- Manure collection and storage
- Manure transfer and land application
- Temporary field stacking
- Feed storage
- Feed processing area
- Mortalities

Establishing magnitude of odor

- Animal housing
- Manure storage

Tools such as Odors from Feedlots Setback Estimation Tool (OFFSET) from University of Minnesota assist with establishing the magnitude of odor from housing and manure storage

Odors From Feedlots Setback Estimation Tool

- Minnesota research determined Odor Emission Numbers for species and housing type provided in chart below
- Odor Emission Number x Sq. feet of facility $\div 10,000 = \text{Odor Emission Factor}$
- Within OMP Odor Emission Factors determine the magnitude of odor from each source
Odors From Feedlots Setback Estimation Tool

OFFSET also provides Odor Emission Numbers for determining Odor Emission Factors for manure storage structures. The tool also provides Odor Control Factors.

Example OFFSET

Document Odor Control Practices

Record practices currently used to reduce odor:
- Incorporate manure
- Vegetative buffers
- Naturally forming crusts on earthen storage

Anticipate practices to address future odor concerns:
- Establish vegetative buffers
- Cover earthen storage with straw during the summer
Identify a method for monitoring odor

Everyone has unique reaction to the same odor
Farm managers are reluctant to make changes based on one individual’s concern
But they are willing to appropriately respond to legitimate concerns
**Identify someone unfamiliar with the farm’s odor who will be responsible for evaluating odor on an as needed basis**
  - Family member who works or lives in town
  - Feed salesman
  - Friend
  - Office employee

Enhancing image within community

Expand circle of connections
- Volunteer for local school activities
- Serve on local government boards or committees
- Coach youth sports
- Join local service organization
Regularly communicate with the farm’s neighbors
- Host a picnic
- Provide neighbors a farm item during holiday season
- Stop for a visit
**Document these activities in the OMP**

Review of the components of an OMP
Watch the second webinar on the OMP template
Complete an OMP for your farm

Questions or concerns email Jerry May at mayg@msu.edu