



Odor Management Plan

Livestock System Progressive Planning Fact Sheet

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Odor is a subjective perception of people detected, through smell, in the air that they breathe. While there is not a lot of sound scientific evidence that odorous gases from livestock operations are toxic at the concentrations experienced by neighbors, odors can become an annoyance or nuisance. For this reason, it is very important that livestock farmers recognize the reality of odors associated with livestock production and plan for their management. The goal of an odor management plan is to identify opportunities and propose action to reduce the frequency and intensity of odors in such a way that tends to create a positive attitude toward the farm.

Components

- 1.) Identify and describe all potential significant sources of odor associated with the farm. Odor sources may include:
 - animal housing areas
 - manure and wastewater storage and treatment areas
 - feed storage areas
 - land application areas
 - areas of standing water and spilled feed
 - fans that collect dust and hold odor
- 2.) Recognize the magnitude of each odor source in relation to potential impact on neighbors and other community members.
 - Odor magnitude is a factor of both the type and size of source.
 - The Michigan OFFSET is one means of estimating odor source magnitudes and potential impacts from animal production facilities. Use the Michigan OFFSET to rank each potential odor source on your farm. Note that field application areas are not considered in this model.
- 3.) Identify management systems and practices that are currently being implemented and new practices that will be implemented to reduce odors. Identify practices that may be adopted if odor concerns increase.
 - There are numerous odor reduction practices available; however, not all have been proven equally effective.
 - Some practices may reduce odor from one part of the system, but increase it in another. For example, long-term manure storage will reduce frequency of agitation of the storage thus producing less frequent odor events, but will likely result in greater intensity and offensiveness of each odor event.
 - Each farm situation is unique and requires site-specific identification and implementation of odor reduction practices to suit the practical and economic limitations of a specific farm.
 - Simple changes in management such as draining areas where water collects and stands, collecting spilled feed and regular fan maintenance will reduce overall farmstead odor.

- 4.) Describe the plan to monitor odor impact and the response to odor concerns as they arise.
 - It is important to identify and record significant odor events including potential impact on neighbors and others. If odor is noticeable to you, your family, or employees, then it is likely noticeable to others.
 - Indicate the point at which additional, previously identified odor reduction measures will be implemented.
- 5.) Identify steps to be implemented to establish and maintain a working relationship with neighbors and community members. Examples include: a.) conducting farming practices that result in greater odor generation at times that will be least problematic for neighbors, b.) notifying neighbors of when there will be an increase in odors, and c.) hosting an annual neighborhood farm tour and/or picnic to foster positive personal relationships with neighbors.

Resources

Assistance for conducting the Michigan OFFSET and completing an odor management plan is available from MSU Extension, commodity organizations such as Michigan Milk Producers Association, and other private consultants.

Reference materials that may be helpful include:

Michigan Right to Farm Generally Accepted Agricultural and Management Practices (GAAMP) for Manure Management and Utilization and Site Selection for New and Expanding Livestock Facilities are available from Michigan Department of Agriculture. <http://www.michigan.gov/mda>

"Preparing an Odor Management Plan." Schmidt, David, Larry Jacobson, and Kevin Janni. Department of Biosystems and Agricultural Engineering, University of Minnesota. 2001. FO-0763. View online or order from: <http://www.extension.umn.edu/distribution/livestocksystems/DI7637.html>

University of Minnesota Manure and Odor Education and Research website: <http://manure.coafes.umn.edu/>

Timing

An odor management plan can be completed at any time of the year.

