MSU Extension Publication Archive

Archive copy of publication, do not use for current recommendations. Up-to-date information about many topics can be obtained from your local Extension office.

Building Good Neighbor Relationships  
Michigan State University  
Michigan State University Extension  
Best Environmental Management Practices, Farm Animal Production  
Paul Wylie, Michigan State University; Don D. Jones, Purdue University  
Issued 2002  
2 pages

The PDF file was provided courtesy of the Michigan State University Library

Scroll down to view the publication.
Best Environmental Management Practices
Farm Animal Production

Building Good Neighbor Relationships
Paul Wylie, Michigan State University, and Don D. Jones, Purdue University

Developing and maintaining good neighbor relations is important for all livestock and poultry producers. There are certain attributes of animal farming that can come up again and again as being objectionable to neighbors. The top two are odor and flies. These are followed by spills on the road, run-off containing manure leaving the farm, and well water contamination. Let us take a look at these concerns and how farmers can minimize their annoyance to neighbors.

Things that Make Neighbors Unhappy
Odor is a subjective human response to what one smells. Studies suggest that to deal with objectionable odor management, farmers need to consider FIDO (frequency, intensity, duration, and offensiveness). Odor problems can be managed by reducing the number of times neighbors detect odors from your operation. Usually this can be done by limiting the times manure is applied on a field near a neighbor or by locating animals and manure storage as far away from their homes as possible. Intensity is the strength of an odor; it is diminished by distance and dilution. Duration has to do with how long odors are present. Strong odors for a short period of time (hours) are usually considered less objectionable than a lighter odor for a long time (days). Offensiveness has to do with how objectionable something smells. Fresh manure usually is judged less offensive than manure from a long-term anaerobic storage, for example. Corn silage has a strong odor, but isn’t offensive to most people. Silo drainage, however, can create very objectionable odors as it decomposes.

Fly problems often result in neighborhood disputes. It may be difficult to say for certain that flies originate from a certain farm, but they can upset neighbors who may then be more sensitive to infractions of good farming practices. Manure spills, as well as soil, on the road can also upset neighbors. Non-farm people often have a higher standard of automobile cleanliness than farmers do.

Most rural residents get their drinking water from wells which can be contaminated by poor farm practices. A soluble form of nitrogen, nitrate nitrogen, can leach down through the soil to water wells at 10 ppm or more, nitrate can upset neighbors who may then be more sensitive to infractions of good farming practices. Manure spills, as well as soil, on the road can also upset neighbors. Non-farm people often have a higher standard of automobile cleanliness than farmers do.

Minimizing Complaints
First of all, how does your farm look to outsiders? A trashy and unkempt farmstead will raise suspicions. Neighbors may think “if you look like a slob, you must be one.” Take a look at nearby businesses and industries. It may not be fair, but they will be compared to your operation. At the least, keep your buildings painted and in good repair. Use fences or vegetative screening to block items that may be unsightly. Keep farm trucks clean can greatly improve appearance on the road or in a parking lot. How do you and your employees look when you go to town? Remember, you want to create a positive, professional impression, and it takes only a time or two to generate an unfavorable reputation.

Figure 1. Consultants or Extension Specialists can often provide suggestions on improving neighbor relations.

Figure 2. Make sure the public sees your operation as a well-kept farmstead.

Like any business, the three most important social aspects of an animal production facility are location, location, and location. Nearly all objectionable things about farming can be minimized by distance. Many states have recognized this by establishing setback distances for new or expanding animal operations. When considering the location of a new animal facility or planning a major expansion, have your Extension Service run the MN or Purdue Odor Estimator computer program (http://danpatch.ecn.purdue.edu/~odor/setback.html) for you to better define the affected area. These programs calculate the area around your operation where odors are apt to be objectionable more than 5% of the time. If the calculated distance is greater than the distance to your neighbors, you should expect complaints, and you should consider relocating, down sizing or using odor minimizing strategies. As a rule of thumb, plan for at least a 1/4-mile minimum setback from any neighboring residence. One should probably also maintain a 300-500 foot setback from property lines when constructing livestock facilities. Consider prevailing winds and air drainage to nearby home sites. Legal setback distance requirements may also apply, so check state and local regulations.

Tips to Minimize Odor
• Inject or immediately incorporate land applied manure.
• Cover stored manure in storage with a roof, a fiberous mat, or a flexible membrane.
• Composting or methane digesters are sometimes feasible in large operations to treat manure and reduce odors.
with a non-residual knock down spray. Avoid residual surface sprays if they seem to be needed, focus on the location of egg laying and maggot development. Cleanliness is a key to controlling fly populations.

**Tips to Reduce Silage Drainage**

Juices from ensiled forages that are harvested too wet (over 70% moisture) will flow from stave or bunker silos. This juice must be contained in a run-off basin and land applied. While small in amount, it has a strong objectionable odor, and if it gets into surface water, can rapidly remove the oxygen needed by aquatic life.

**Protecting Water Quality**

Protect ground water supplies for your family and for your neighbors. There is a potential for nitrate contamination if applying manure to porous soils or areas with high water tables. Manure and fertilizer nitrogen should be applied at a rate to meet the annual needs of the crop. Ideally, it should be applied as near to crop uptake as possible. Fall-applied manure should be done when the soil has cooled to less than 30 degrees and a crop cover planted on soils that are vulnerable to erosion and runoff.

Surface water can be degraded by phosphorus that leaves the field on soil particles or as soluble P leached from P-saturated soils. Minimize soil erosion and use grass filter strips. Monitor soil P test levels so that manure is not applied to fields where tests exceed 40 ppm Bray P<sub>2</sub>. Once soil tests exceed 40 ppm Bray P<sub>2</sub>, discontinue fertilizer P<sub>2</sub>O<sub>5</sub>. If soil test P reaches 75 ppm, manure phosphate should only be applied at the rate of annual crop removal.

About this Publication

This publication was funded by USDA Special Needs, Purdue University, and Michigan State University. It was adapted in part from the Livestock and Poultry Environmental Stewardship project, funded by the U.S. EPA, coordinated by the University of Nebraska-Lincoln, and published by the MidWest Plan Service, 122 Davidson Hall, Iowa State University, Ames, Iowa 50011-3080. See <http://www.lpes.org> or call (800-562-3618) to obtain access to this and other lessons.

**Publications in this series:**

- Land Application Records and Sampling
- Emergency Action Planning for Livestock Operations
- Mortality Management
- Inspecting Your Confined Feeding Operation
- Feeding Strategies to Lower N&P in Manure
- Building Good Neighbor Relationships
- Disposal of Farm Medical Waste
- Manure Nutrient Recycling
- Environmentally Sensitive Field Characteristics
- Manure Applicator Calibration
- Odor Control Options for Confined Feeding
- Comprehensive Nutrient Management Plans