Animal Manure Regulation in Ohio

Peggy Kirk Hall, Asst. Professor and Field Specialist
OSU Extension Agricultural & Resource Law Program

Although long considered a natural fertilizer that can benefit our soils, manure has a history of increased regulation in recent years based on potential impacts to water quality. The following explains how state and federal law regulates the production, storage and application of animal manure in Ohio.

Livestock Environmental Permitting Program

The Ohio Department of Agriculture’s Division of Livestock Environmental Permitting (ODA) administers a permit program for Ohio’s largest confined livestock operations, or Concentrated Animal Feeding Facilities (CAFFs). Ohio Revised Code Chapter 903 and Ohio Administrative Code 901:10 contain the program’s legal provisions.

An owner must obtain a “permit to install” and a “permit to operate” from ODA before operating a CAFF. The permit requirement applies to a CAFF that houses any of the following, at a minimum:

- 700 mature dairy cows
- 2,500 hogs over 55 pounds
- 10,000 baby pigs under 55 pounds
- 82,000 laying hens
- 125,000 pullets or broilers
- 1,000 head of beef animals of any size
- 500 horses
- 10,000 sheep or lambs
- 55,000 turkeys

Related to manure, obtaining the “permit to install” requires a CAFF owner to submit information on:

- Maps indicating CAFF boundaries, manure storage facility dimensions, location and siting distances and locations of subsurface drains within 100 feet of manure storage.
- Geological study results with information on soil; groundwater sampling and analysis; hydrology; geology and topography of land used for manure storage.
- Listing of the type, amount and nutrient content of manure from the facility.

For the permit to operate, the CAFF must submit a Manure Management Plan that outlines the Best Management Practices the CAFF will implement to minimize water impacts from the storage and use of manure. The Manure Management Plan must include:

- A nutrient budget.
- Manure and soil characterizations.
- Manure distribution and utilization methods
- Methods for minimizing odor.
- Inspection, maintenance and monitoring practices.
- Land application methods.

Land Application for Permitted CAFFs

Land application of manure by a permitted CAFF or by a Certified Livestock Manager working with the CAFF must be in accordance with ODA regulations, which include requirements for:

- Soil and manure tests.
- Crop yields and rotations to determine nutrient needs.
- Setbacks from streams, neighbors and wells.
• Limitations on amounts of nitrogen, phosphorus and liquid applied.
• Weather predictions.
• Examination of soil condition for cracks, earthworm burrows and plant root pathways to tile or tile blowouts in the field.
• Monitoring of tile outlets during and after application.
• Restrictions against runoff or ponding of manure.
• Recordkeeping requirements.
• Inspection requirements.

If a local farmer uses manure from a permitted CAFF for application on another farm, the CAFF must provide the farmer with the ODA’s application requirements and a current manure test. The farmer must certify when and how much manure was taken from the CAFF. The farmer’s land application of manure then falls under the Agricultural Pollution Abatement Program, described below.

National Pollutant Discharge Elimination System (NPDES) Permits

The federal Clean Water Act requires livestock operations defined as “Confined Animal Feeding Operations” (CAFOs) to obtain a federal NPDES permit if they discharge or propose to discharge a pollutant to surface waters, even if the operation has obtained a permit from ODA. The Ohio EPA administers the NPDES permit process, which requires operators to control spills and runoff from their facilities and from the land application of manure. To obtain a permit, a CAFO must develop and implement a Manure Management Plan that addresses:
• Practices to ensure adequate manure storage capacity and proper maintenance and operation of storage facilities.
• Practices to divert clean storm water away from production areas.
• Practices to ensure that animals and manure in the production area do not come into direct contact with waters of the State.
• A land application plan that includes:
  • A nutrient budget.
  • Manure and soil characterizations.
  • Application methods and timing.
  • Agronomic application rates.

CAFO owners must also meet ongoing monitoring, recordkeeping and reporting requirements and are subject to enforcement actions for violations.

Certified Livestock Manager Certification

Ohio law requires Ohio’s largest CAFFs and every manure broker or manure applicator who handles more than 4,500 dry tons or 25 million liquid gallons of manure per year to obtain the Certified Livestock Manager (CLM) certification from ODA. The applicant must complete core classes on nutrient management standards, manure storage and handling and Ohio manure regulations and must also complete three elective classes on water quality, soil testing, stockpiling, emergency action plans, spill reporting, value of manure nutrients, recordkeeping, biosecurity, liability or applying manure to growing crops. CLMs must complete ten hours of continuing education every three years to maintain their certification.

Ohio Agricultural Pollution Abatement Program

Ohio’s Agricultural Pollution Abatement Program (APAP) applies to agricultural operations that are not subject to the above state and federal permit programs for CAFFs and CAFOs. As stated in Ohio Revised Code 1511 and Ohio Administrative Code 1501:15-5, APAP provides state standards for management and conservation practices that aim to abate water pollution resulting from animal manure. The Ohio Department of Natural Resources Division of Soil and Water Resources (ODNR) administers APAP in cooperation with local Soil and Water Conservation Districts (SWCD).

Ohio’s APAP regulations establish Best Management Practices (BMPs) for livestock operators. The standards encourage operators to:
• Operate and maintain animal manure collection, storage or treatment facilities to prevent seepage, overflow or discharge of animal manure into waters of the state.
• Prevent the discharge of manure-contaminated runoff from animal feedlots and animal manure management facilities.
• Prevent pollution caused by flooding; construct animal feeding operations so that animal manure will not be inundated by a 25 year frequency flood.
Minimize pollution from land application of manure by adopting manure application practices that consider the characteristics of the animal manure, available land, topography, cropping system, method of application, weather, time of the year, condition of the soil, other nutrients applied and nutrient status of the soil.

Technical expertise and cost-share assistance is available through APAP to help operators install and implement BMPs and develop Operation and Management Plans. The law provides a complaint-driven process for suspected pollution incidents that can result in an investigation by ODNR or SWCD. Farms that cause pollution and fail to adopt the recommended BMPs to address pollution abatement must develop and implement modifications to their facilities as approved by ODNR or SWCD, or face enforcement actions.

For more information on the regulation of animal manure in Ohio, refer to these resources:

Ohio Revised Code
http://codes.ohio.gov/orc

Ohio Administrative Code
http://codes.ohio.gov/oac

ODA Livestock Environmental Permitting and Certified Livestock Manager
www.agri.ohio.gov/divs/DLEP/dlep.aspx

Ohio EPA Confined Animal Feeding Operations
www.epa.ohio.gov/dsw/cafo/index

Ohio DNR Agricultural Pollution Abatement
www2.ohiodnr.com/soilwater/water-conservation/agricultural-pollution-abatement

Watershed in Distress Regulations

The Ohio APAP regulations also contain rules that apply to certain producers of manure within areas designated as “watersheds in distress,” located in Ohio Administrative Code 1501:15-5-19 to 20. The chief of ODNR’s Division of Soil and Water Resources, with approval of the Ohio Soil and Water Conservation Commission, may designate a watershed to be in distress when aquatic life and health is impaired by nutrients or sediment from agricultural land uses and where there is a threat to public health, drinking water supplies, recreation, or public safety and welfare. Within the boundaries of a designated watershed in distress, these additional regulations apply to animal facility owners and operators and manure applicators:

- No land application of manure may occur between December 15 and March 1 without prior approval from the agency; before and after these dates, applications of manure on frozen ground or ground covered in more than one inch of snow may occur only if injected into the ground or incorporated within 24 hours of surface application.
- No land application of manure if the local weather forecast shows more than a 50% chance that precipitation would exceed one-half inch of rain in the 24 hours after the proposed application.
- Restrictions on the application of snowpack manure.
- An operation must ensure a minimum of 120 days of manure storage as of December 1 of each year and keep records of manure storage volumes.
- Anyone who produces, applies or receives more than 350 tons or 150,000 gallons of manure per year must have an approved Nutrient Management Plan that addresses the methods, amount, form, placement, cropping system and timing of all nutrient applications, unless the farm is already operating under a permit from ODA’s DLEP or an NPDES permit from OEPA.