

Questions Pertaining to Large Dairy Enterprises in Ohio: Regulations

Who regulates dairy farms, especially the large farms?

Three government agencies regulate dairy farms in Ohio:

1. The Ohio Department of Agriculture (ODA), Dairy Division, regulates Ohio dairy farms selling Grade A milk (milk produced for fluid consumption or manufacture of dairy products) or manufacture grade milk (milk used for manufacture of dairy products). The ODA inspects Grade A farms at least once every six months and manufacture grade farms at least once every 12 months. The ODA checks for cleanliness, fly and rodent control, well water quality, and general sanitary conditions.
2. The ODA, Livestock Permitting Division, provides oversight for dairy farms with ≥ 700 mature dairy cows or $\geq 1,000$ heifers. Some 135 livestock and poultry farms in Ohio are large enough to require ODA permits, of which about five are dairy farms.
3. The Ohio Environmental Protection Agency (OEPA) is responsible for issuing permits relative to the National Pollutant Discharge Elimination System (NPDES). With the release of new rules by Federal EPA in December 2002, a NPDES permit is required for all concentrated animal feeding operations (CAFO).
4. The Ohio Department of Natural Resources (ODNR), Division of Soil and Water Conservation, and local Soil and Water Conservation Districts (SWCD) have authority relative to water quality on farms. The agencies offer incentives to farmers to participate in various pollution-prevention strategies, including Conservation Plans, Manure Nutrient Management Plans, and construction plans for collecting and storing manure. The agencies have a complaint process, as well. If voluntary efforts are unsuccessful, violators can face up to six months in jail and \$1,000 per day in fines.

Who can I turn to if I have a complaint about a livestock farm?

There are several agencies to contact regarding complaints:

1. ODA handles complaints for CAFO.
2. OEPA handles complaints relating to laws and regulations regarding water-quality standards.
3. The local SWCD office (listed under local county offices in the phone directory) in each county handles complaints against agricultural operations that are impacting water quality.
4. The local ODNR-Division of Wildlife office handles fish kills and stream litter.

What kind of local controls is available to monitor and regulate large farms?

Like most industries, Ohio agriculture is largely regulated by state rather than local laws. Ohio's zoning law exempts agricultural buildings from regulation; livestock production is considered an agricultural use, regardless of size.

Once a farm has received a permit, how is future expansion handled or regulated?

Dairy farms with ≥ 700 cows or $\geq 1,000$ heifers are described as large CAFO and are required to file for a Permit to Install (PTI) and a Permit to Operate (PTO) from ODA. Farmers must apply for a new PTI and PTO from ODA anytime they increase the number of livestock above the levels provided in the original permit.

Are manure management plans available to the public for viewing?

The public can request to view applications for PTI and PTO from ODA. Facilities that are not designated as a CAFO

are not required to file a plan; however, plans for these farms that have been filed voluntarily may be viewed by contacting the local SWCD office or the farmer.

What is an animal unit, according to ODA regulations?

The term “animal unit” was first published in the Federal Register on March 18, 1976. The basis for an animal unit used a 1,000-lb. feeder steer as a reference (1.0 animal unit) and was described as follows: “The term ‘animal unit’ was a unit of measurement for any animal feeding operation calculated by the following: the number of slaughter and feeder cattle multiplied by 1.0, plus the number of mature dairy cattle multiplied by 1.4, plus the number of swine weighing over 55 pounds multiplied by 0.4, plus the number of sheep multiplied by 0.1, plus the number of horses multiplied by 2.0.” Congress developed the definition of an animal unit based on the size and number of animals that posed a threat to waters of the United States. This effort was not done with exact science based on the amount of manure produced but more on the thoughts of how many facilities of that size existed and what number of that type of animals could US EPA afford to permit.

With the new rules for the Clean Water Act released in December 2002, the animal unit methodology was eliminated. The number of animals by species to designate a large CAFO are shown in Table 1. A medium dairy CAFO has at least 200 cows or 300 heifers and a man-made ditch or pipe carries manure or wastewater from the operation or the animals come into contact with surface water running through the area where they are contained. Regardless of size, an animal feeding operation can be designated as a CAFO if the permitting authority inspects the operation and finds it is adding pollutants to surface waters.

Do dairy farms with fewer than 700 cows have to follow the same laws as the large farms?

Dairy farms with < 700 cows or < 1,000 heifers are not required to obtain a PTI or PTO; however, other regulations apply to all farms, regardless of size. The nutrient management plans conducted by SWCD for smaller farms take into account both nitrogen and phosphorus as well as the crop needs, tillage practices, rotations, yield records, available water-holding ability of the soil, and manure application methods. This is usually an even more comprehensive plan than the one required for permits issued by ODA.

How many farms are regulated at the present time by the ODA?

Approximately 135 livestock and poultry farms were being regulated by ODA as of December 2002. The remaining farms in Ohio fall under the oversight of the local SWCD and ODNR, Division of Soil and Water Conservation, first through voluntary participation in various best-management practices and secondly by way of legal steps when voluntary actions do not resolve water-quality complaints.

Table 1. Animal Numbers for Large Concentrated Animal Feeding Operations.

Beef cattle	1,000
Dairy cattle	
Mature cows	700
Heifers	1,000
Veal calves	1,000
Horses	500
Swine	
≥ 55 lb	2,500
< 55 lb	10,000
Sheep	10,000
Ducks	
Liquid manure system	5,000
Other than liquid manure	30,000
Chickens	
Liquid manure system	30,000
Laying hens, other than liquid manure	82,000
Except laying hens, other than liquid manure	125,000
Turkeys	55,000

What is the maximum amount of manure that is suitable for application to land? Are there regulations or guidelines on manure application?

The amount of manure that should be applied to land depends on the concentrations of phosphorus (P), and sometimes nitrogen (N), in the manure and how much of these nutrients are already in the soil where the manure is going to be applied. The Natural Resources and Conservation Service (NRCS) bases application rates on the most restrictive nutrient, which typically is P (P_2O_5 crop average removal rate for the next crop rotation) but not to exceed the N requirement for the next crop. Generally, manure application to land is an acceptable practice, but Ohio State University Extension (OSUE) does not recommend that manure be applied if it will raise soil P concentrations in the plow layer above 250 to 300 lb. P/acre, when measured using the Bray-1 soil test. Raising P concentrations above these levels provides no agronomic benefit and may increase the risk of water pollution.

Detailed recommendations for manure application can be found in OSUE Bulletin 604, *Ohio Livestock Manure and Wastewater Management Guide* (<http://ohioline.ag.ohio-state.edu/b604/index.html>). Besides nutrient concentrations in manure and soil, other factors considered are setbacks from drainage ditches, homes, and wells, maximum rates of liquid manure to be applied at any one time based on “Available Water Capacity,” etc. The ODA, the OEPA, and the ODNR (<http://oh.nrcs.usda.gov/fotg/OhioNRCStandards1.htm#T2Z>) have regulations and guidelines for land application of animal manure that may apply in certain situations.

If a livestock farm pollutes the water or air, who has the authority to take corrective action?

Four agencies — ODA, OEPA, ODNR-Division of Wildlife, and SWCD — handle water-quality violations. The OEPA and local health departments will address some air-pollution issues.

How do rules change when an operation exceeds 700 cows or 1,000 heifers?

When a facility plans on expanding beyond 700 cows or 1,000 heifers, it must apply for a PTI and PTO from ODA.

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Abbreviations

CAFO = Concentrated Animal Feeding Operation

EPA = Environmental Protection Agency

N = Nitrogen

ODA = Ohio Department of Agriculture

OEPA = Ohio Environmental Protection Agency

ODNR = Ohio Department of Natural Resources

OSUE = Ohio State University Extension

NPDES = National Pollutant Discharge Elimination System

NRCS = Natural Resources and Conservation Service

P = Phosphorus

PTI = Permit to Install

PTO = Permit to Operate

SWCD = Soil and Water Conservation District

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