

## Introduction to the *Iowa Manure Manager Series*

The issues surrounding management of manure from regulatory to agronomic issues are of great interest to Iowa crop and livestock producers. It's no secret that livestock nutrients are a valuable resource to farmers, supplying essential nutrients required for crop growth. However, it is also no secret that too much manure or manure improperly handled or land-applied can also be a detriment to soil and water quality.

The agriculture community recognizes the need to provide information on regulations, best management practices, and neighbor relations to Iowa's farmers. This information will be shared in a series of monthly fact sheets addressing manure management issues. This fact sheet is the first in the series to help you determine how your operation is classified under state and federal regulations.

### Determining your type and size of livestock operation

A major component to using this series of publications and knowing what regulations apply to your operation is learning the terminology used to describe livestock operations. More than one type of designation may apply to your farm if you have a farm with multiple livestock species present or different types of housing structures.

### Iowa Regulations

In Iowa, the regulatory requirements for animal feeding operations is separated by the type of structures used to house your animals, usually a confinement operation or an open feedlot, and then divided by the size of the operation. The following definitions come from Chapter 65 of the Iowa Administrative Code.

*An Animal Feeding Operation* is "a lot, yard, corral, building, or other area in which animals are confined and fed and maintained for 45 days or more in any 12-month period, and all structures used for the storage of manure from animals in the operation. An animal feeding operation does not include a livestock market. Open feedlots and confinement feeding operations are considered to be separate animal feeding operations."

*Animal Unit* is the term used to provide a common basis for measuring different species or animal types when calculating the size of an animal feeding operation. The number of ani-

mal units is determined by multiplying the number of animals in each category by an equivalency factor.

Type of Category	Animal Unit Factor
Slaughter and feeder cattle	1.0
Immature dairy cattle	1.0
Mature dairy cattle	1.40
Market or breeding swine weighing more than 55 lbs	0.40
Swine weighing 15 lbs or more but not more than 55 lbs	0.10
Sheep or lambs	0.10
Horses	2.0
Turkeys weighing 112 ounces or more	0.018
Turkeys weighing less than 112 ounces	0.0085
Chickens weighing 48 ounces or more	0.010
Chickens weighing less than 48 ounces	0.0025

*A Confinement Feeding Operation* is "an animal feeding operation in which animals are confined to areas which are totally roofed."

*An Open Feedlot* is "a lot, yard, corral, building, or other area used to house animals in conjunction with an open feedlot operation."

*An Open Feedlot Operation* is "an unroofed or partially roofed animal feeding operation if crop, vegetation, or forage growth or residue is not maintained as part of the animal feeding operation during the period that animals are confined in the animal feeding operation."

*A Small Animal Feeding Operation* or commonly referred to as a SAFO is a term associated with a confinement feeding operation and is defined as "an animal feeding operation which has an animal unit capacity of 500 or fewer animal units."

For water quality purposes, two operations may be counted together for purposes of state regulations if they are under common ownership or common management and if they are adjacent or utilize a common area or system for manure or open feedlot effluent disposal.

### Contributors

- Natural Resource Conservation Service
- Agribusiness Assoc. of Iowa
- Iowa Farm Bureau Federation
- Iowa Poultry Association
- Iowa Turkey Federation
- Iowa Pork Industry Center
- Iowa Beef Center
- Iowa Pork Producers Assoc.
- Iowa Department of Natural Resources
- Iowa Cattlemen's Assoc.
- Division of Soil Conservation, Iowa Department of Agriculture and Land Stewardship
- Iowa State Dairy Association
- Iowa Commercial Nutrient Applicators Assoc.
- Coalition to Support Iowa's Farmers
- Iowa Corn Growers Assoc.
- Iowa Soybean Association
- Iowa State University, University Extension
- Iowa State University, College of Agriculture

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For confinement operations, two operations are adjacent if one of the structures was constructed on or after May 21, 1998, and are closer than the following distances:

- (1) 1,250 feet for operations having a combined animal unit capacity of less than 1,000 animal units.
- (2) 2,500 feet for operations having a combined animal unit capacity of 1,000 animal units or more.

For open feedlots operations, two operations are adjacent if one of the structures was constructed on or after July 17, 2002, and any open feedlot structure from the two operations is closer than 1,250 feet to the other operation.

## Federal Regulations

Federal law does not classify operations by housing type, but by species and animal type. This may result in different classifications under state and federal regulations. Both state and federal regulations must be followed so an analysis of both set of classification systems should be done.

*An Animal Feeding Operation (AFO)* is a lot or facility where animals have been, are, or will be stabled or confined and fed or maintained for a total of 45 days or more in any 12-month period, and where crop, vegetation, forage growth, or post-harvest residues are not sustained in the normal growing season over any portion of the lot or facility. Livestock markets are not exempt from the federal regulations.

*Concentrated Animal Feeding Operation (CAFO)* is an AFO that is defined as a Large CAFO or as a Medium CAFO, or that is designated as a CAFO. Two or more AFOs under common ownership are considered to be a single AFO for the purposes of determining the number of animals at an operation, if they adjoin each other or if they use a common area or system for the disposal of wastes. Federal law does not combine operations which are only under common management and does not define the distance they need to be separated in order to be considered as two separate operations.

*A Large CAFO* is defined by the size of operation listed in the table.

*A Medium CAFO* is an AFO that has at least the number of animals as identified in the table below and must meet one of the following requirements: 1) pollutants are discharged into waters of the United States through a man-made ditch, flushing system, or other similar man-made device; or 2) pollutants are discharged directly into waters of the United States which originate outside of and pass over, across or through the facility or otherwise come into direct contact with the animals confined in the operation. If an operation is found to be a significant contributor of pollutants, EPA or DNR may designate a

medium-sized facility as a CAFO.

*A Small CAFO* confines fewer than the number of animals listed in the table and has been designated as a CAFO by the EPA or DNR.

Animal Sector	Size Thresholds (Number of Animals)	
	Large CAFOS	Medium CAFOS
Cattle or cow/calf pairs	1,000 or more	300-999
Veal calves	1,000 or more	300-999
Mature dairy cows	700 or more	200-699
Swine (weighing 55 lbs or more)	2,500 or more	750-2,499
Swine (weighing less than 55 lbs)	10,000 or more	3,000-9,999
Horses	500 or more	150-499
Sheep or lambs	10,000 or more	3,000-9,999
Chickens (other than laying hens) if AFO uses other than liquid manure handling system	125,000 or more	37,500-124,999
Laying hens or broilers if AFO uses liquid manure handling system	30,000 or more	9,000-29,999
Laying hens (other than liquid handling systems)	82,000 or more	25,000-81,999
Turkeys	55,000 or more	16,500-54,999

Individual assistance in answering questions on your farm's environmental status is available from partners of this program. Visit <http://extension.agron.iastate.edu/immag/> for more information.

## Additional Resources

Iowa Administrative Code Chapter 65: <http://www.legis.state.ia.us/Rules/Current/iac/567iac/56765/56765.pdf>

EPA Animal Feeding Operations Web Page: [http://cfpub.epa.gov/npdes/home.cfm?program\\_id=7](http://cfpub.epa.gov/npdes/home.cfm?program_id=7)

EPA's Concentrated Animal Feeding Operations Final Rule: <http://cfpub.epa.gov/npdes/afo/cafofinalrule.cfm>

EPA NPDES Glossary of Terms: <http://cfpub.epa.gov/npdes/glossary.cfm>

EPA's proposed revisions to the Final CAFO rule: <http://cfpub.epa.gov/npdes/afo/aforule.cfm>

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