

567—65.100(455B,459,459A) Definitions. In addition to the definitions in Iowa Code sections 455B.101 and 455B.171 and 2005 Iowa Code Supplement section 459A.102, the following definitions shall apply to Division II of this chapter:

“Abandoned” means an open feedlot operation structure that has been razed, removed from the site of an open feedlot operation, filled in with earth, or converted to uses other than an open feedlot operation structure so that it cannot be used as an open feedlot operation structure without significant reconstruction.

“Adjacent.” Two or more open feedlot operations are defined as adjacent if both of the following occur:

1. At least one open feedlot operation structure is constructed on or after July 17, 2002.
2. An open feedlot operation structure which is part of one open feedlot operation is separated by less than 1250 feet from an open feedlot operation structure which is part of the other open feedlot operation.

“Alternative technology settled open feedlot effluent control system” or *“AT system”* means use of an open feedlot effluent control technology other than a conventional runoff containment system to control and dispose of settled open feedlot effluent. The department may allow an open feedlot operation covered by the NPDES permit application requirements of 65.102(455B,459A) or 65.103(455B,459A) to use an AT system, provided the open feedlot operation satisfactorily demonstrates the AT system will provide an equivalent level of performance to that achieved by a runoff containment system that is designed and operated as required by statute, 567—subrule 62.4(12) and Division II of this chapter. Demonstration of equivalent performance must include submitting results of computer modeling which compares the predicted performance of the proposed system with that of a conventional runoff containment system over the same period. The specific requirements which must be met for an open feedlot operation to qualify for use of an AT system and the information which must be submitted to the department are outlined in rule 65.110(459A).

Design requirements have been established for two types of AT systems. These are a vegetative infiltration basin (VIB) followed by a vegetative treatment area (VTA) and a stand-alone vegetative treatment area (VTA). If other AT systems are developed that meet the equivalent performance standard established under EPA’s CAFO rules, the department will consider their acceptance on a case-by-case basis.

“Animal” means a species classified as cattle, swine, horses, sheep, chickens or turkeys.

“Animal capacity” means the maximum number of animals which the owner or operator will confine in an open feedlot operation at any one time.

“Animal feeding operation” or *“AFO”* means 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.

Pursuant to federal regulations, a livestock market could satisfy the definitions of an AFO and a CAFO and thus be subject to NPDES permit requirements. In order to implement the federal NPDES permit program, the commission must adopt rules which are no less stringent than federal regulations. Therefore, for the purposes of the NPDES permit program, an AFO can include a livestock market.

“Animal unit” means a unit of measurement based upon the product of multiplying the number of animals of each category by a special equivalency factor, as follows:

1. Slaughter and feeder cattle	1.000
2. Immature dairy cattle	1.000
3. Mature dairy cattle	1.400
4. Butcher or breeding swine weighing more than 55 pounds	0.400
5. Swine weighing 15 pounds or more but not more than 55 pounds	0.100
6. Sheep or lambs	0.100
7. Horses	2.000
8. Turkeys weighing 112 ounces or more	0.018
9. Turkeys weighing less than 112 ounces	0.0085
10. Chickens weighing 48 ounces or more	0.010
11. Chickens weighing less than 48 ounces	0.0025

“Animal unit capacity” means a measurement used to determine the maximum number of animal units that may be maintained as part of an open feedlot operation.

“Common management” means significant control by a person of the management of the day-to-day operations of each of two or more open feedlot operations. “Common management” does not include control over a contract livestock facility by a contractor, as defined in Iowa Code section 202.1.

“Common ownership” means to hold an interest in each of two or more open feedlot operations as any of the following:

1. A sole proprietor.
2. A joint tenant or tenant in common.
3. A holder of a majority equity interest in a business association as defined in Iowa Code section 202B.102, including as a shareholder, partner, member, beneficiary, or other equity interest holder.

An interest in an open feedlot operation under “2” or “3” above is a common ownership interest when it is held directly or indirectly through a spouse or dependent child, or both.

“Concentrated animal feeding operation” or *“CAFO”* means an AFO that is defined as a large CAFO, a medium CAFO, or a designated CAFO.

“Deep well” means a well located and constructed in such a manner that there is a continuous layer of low permeability soil or rock at least 5 feet thick located at least 25 feet below the normal ground surface and above the aquifer from which water is to be drawn.

“Designated area” means a known sinkhole, or a cistern, abandoned well, unplugged agricultural drainage well, agricultural drainage well surface tile inlet, drinking water well, designated wetland, lake, or water source. A designated area does not include a terrace tile inlet or surface tile inlet other than an agricultural drainage well surface tile inlet.

“Designated CAFO” means an AFO that has been designated as a CAFO pursuant to rule 65.103(455B,459A).

“Discontinued open feedlot operation” means an open feedlot operation in which the open feedlot operation structures have been abandoned or the use of the open feedlot operation structures has been discontinued as evidenced by the removal of all animals, and the owner or operator has no immediate plans to repopulate the structures.

“Formed settled open feedlot effluent basin” means a settled open feedlot effluent basin which has walls and a floor constructed of concrete, concrete block, wood, steel, or similar materials. Similar materials may include, but are not limited to, plastic, rubber, fiberglass, or other synthetic materials. Materials used in a formed settled open feedlot effluent basin shall have the structural integrity to withstand expected internal and external load pressures.

“Karst terrain” means land having karst formations that exhibit surface and subterranean features of a type produced by the dissolution of limestone, dolomite, or other soluble rock and characterized by closed depressions, sinkholes, losing streams, or caves. If a 25-foot vertical separation distance can be maintained between the bottom of an open feedlot operation structure and limestone, dolomite, or other soluble rock, then the structure is not considered to be in karst terrain. Assistance in identifying karst terrain or potential karst terrain may be obtained by referring to:

http://csbweb.igsb.uiowa.edu/imsgate/maps/afo_siting_atlas.asp.

“*Large concentrated animal feeding operation*” or “*large CAFO.*” An AFO is defined as a large CAFO if it stables or confines as many as or more than the numbers of animals specified in any of the following categories:

1. 700 mature dairy cows, whether milked or dry;
2. 1,000 cattle, including but not limited to heifers, steers, bulls, veal calves and cow/calf pairs;
3. 2,500 swine each weighing 55 pounds or more;
4. 10,000 swine each weighing less than 55 pounds;
5. 500 horses;
6. 10,000 sheep or lambs;
7. 55,000 turkeys;
8. 30,000 laying hens or broilers, if the AFO uses a liquid manure handling system;
9. 125,000 chickens (other than laying hens), if the AFO uses other than a liquid manure handling system;
10. 82,000 laying hens, if the AFO uses other than a liquid manure handling system;
11. 1,000 animal units, where more than one category of animals is maintained using the same type of operation.

“*Manure*” means animal excreta or other commonly associated wastes of animals including, but not limited to, bedding, compost, litter, feed losses, raw materials or other materials commingled with manure or set aside for disposal.

“*Medium concentrated animal feeding operation*” or “*medium CAFO.*” The term medium CAFO includes any AFO with the type and number of animals that fall within any of the ranges listed in paragraph “*a*” of this definition and which has been defined or designated as a CAFO. An AFO is defined as a medium CAFO if:

- a. The type and number of animals that it stables or confines fall within any of the following ranges:
 - (1) 200 to 699 mature dairy cows, whether milked or dry;
 - (2) 300 to 999 cattle, including but not limited to heifers, steers, bulls, veal calves and cow/calf pairs;
 - (3) 750 to 2,499 swine each weighing 55 pounds or more;
 - (4) 3,000 to 9,999 swine each weighing less than 55 pounds;
 - (5) 150 to 499 horses;
 - (6) 3,000 to 9,999 sheep or lambs;
 - (7) 16,500 to 54,999 turkeys;
 - (8) 9,000 to 29,999 laying hens or broilers, if the AFO uses a liquid manure handling system;
 - (9) 37,500 to 124,999 chickens (other than laying hens), if the AFO uses other than a liquid manure handling system;
 - (10) 25,000 to 81,999 laying hens, if the AFO uses other than a liquid manure handling system;
 - (11) 300 to 999 animal units, where more than one category of animals is maintained using the same type of operation; and

b. Either one of the following conditions is met:

- (1) Manure or process wastewater is discharged into waters of the United States through a man-made ditch, flushing system, or other similar man-made device; or
- (2) Manure or process wastewater is 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 animals confined in the operation.

“*NPDES permit*” means a written permit of the department pursuant to the National Pollutant Discharge Elimination System (NPDES) program, to authorize and regulate the operation of a CAFO.

“*Nutrient management plan*” or “*NMP*” means a plan which provides for the management of manure, process wastewater, settled open feedlot effluent, settleable solids, open feedlot effluent, including the application of effluent, as provided in 65.112(459A).

“*Open feedlot*” means a lot, yard, corral, building, or other area used to house animals in conjunction with an open feedlot operation.

“*Open feedlot effluent*” means a combination of manure, precipitation-induced runoff, or other runoff from an open feedlot before its settleable solids have been removed.

“Open feedlot operation” means 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.

2005 Iowa Code Supplement section 459A.103 provides that two or more open feedlot operations under common ownership or management are deemed to be a single open feedlot operation if they are adjacent or utilize a common area or system for open feedlot effluent disposal. To determine if two or more open feedlot operations are deemed to be one open feedlot operation, the first test is whether the open feedlot operations are under common ownership or management. If they are not under common ownership or management, they are not one open feedlot operation. The second test is whether the two open feedlot operations are adjacent or utilize a common area or system for open feedlot effluent disposal. If the two operations are not adjacent and do not use a common area or system for open feedlot effluent disposal, they are not one open feedlot operation.

“Open feedlot operation structure” means an open feedlot, settled open feedlot effluent basin, a solids settling facility, or an AT system. “Open feedlot operation structure” does not include a manure storage structure as defined in Iowa Code section 459.102.

“Owner” means the person who has title to the property where the animal feeding operation is located or the person who has title to the animal feeding operation structures. “Owner” does not include a person who has a lease to use the land where the animal feeding operation is located or to use the animal feeding operation structures.

“Permanent vegetation cover” means land which is maintained in perennial vegetation cover consisting of grasses, legumes, or both, and includes, but is not limited to, pastures, grasslands or forages.

“Process wastewater” means water directly or indirectly used in the operation of the AFO for any or all of the following: spillage or overflow from animal or poultry watering systems; washing, cleaning, or flushing pens, barns, manure pits, or other AFO facilities; direct contact swimming, washing, or spray cooling of animals; or dust control. Process wastewater also includes any water which comes into contact with any raw materials, products, or byproducts including manure, litter, feed, milk, eggs or bedding.

“Production area” means that part of an AFO that includes the area in which animals are confined, the manure storage area, the raw materials storage area, and the waste containment areas. The area in which animals are confined includes, but is not limited to, open lots, housed lots, feedlots, stall barns, free stall barns, milk rooms, milking centers, cow yards, barnyards, medication pens, walkers, animal walkways, and stables. The manure storage area includes, but is not limited to, lagoons, solids settling facilities, settled open feedlot effluent basins, storage sheds, stockpiles, under house or pit storages, liquid impoundments, static piles, and composting piles. The raw materials storage area includes, but is not limited to, feed silos, silage bunkers, and bedding materials. The waste containment area includes, but is not limited to, settling basins and areas within berms and diversions which separate uncontaminated storm water. Also included in the definition of production area is any area used in the storage, handling, treatment, or disposal of mortalities.

“Professional engineer” means a person engaged in the practice of engineering as defined in Iowa Code section 542B.2 who is issued a certificate of licensure as a professional engineer pursuant to Iowa Code section 542B.17.

“Release” means an actual, imminent or probable discharge of process wastewater, manure, open feedlot effluent, settled open feedlot effluent, or settleable solids from an open feedlot operation structure to surface water, groundwater, or an actual, imminent or probable discharge directly to a drainage tile line or intake resulting from storing, handling, transporting or land-applying process wastewater, manure, open feedlot effluent, settled open feedlot effluent or settleable solids.

“Settleable solids” means that portion of open feedlot effluent that meets all the following requirements:

1. The solids do not flow perceptibly under pressure.
2. The solids are not capable of being transported through a mechanical pumping device designed to move a liquid.

3. The constituent molecules of the solids do not flow freely among themselves but do show the tendency to separate under stress.

“Settled open feedlot effluent” means a combination of manure, precipitation-induced runoff, or other runoff originating from an open feedlot after its settleable solids have been removed.

“Settled open feedlot effluent basin” or *“runoff control basin”* means a covered or uncovered impoundment which is part of an open feedlot operation, if the primary function of the impoundment is to collect and store settled open feedlot effluent.

“Shallow well” means a well located and constructed in such a manner that there is not a continuous layer of low permeability soil or rock (or equivalent retarding mechanism acceptable to the department) at least 5 feet thick, the top of which is located at least 25 feet below the normal ground surface and above the aquifer from which water is to be drawn.

“Solids settling facility” means a basin, terrace, diversion, or other structure or solids removal method which is part of an open feedlot operation and which is designed and operated to remove settleable solids from open feedlot effluent. A “solids settling facility” does not include a basin, terrace, diversion, or other structure or solids removal method which retains the liquid portion of open feedlot effluent for more than seven consecutive days following a precipitation event.

“Stockpile” means any accumulation of manure, scraped solids, settleable solids or combination of manure and solids located outside of the open feedlot, where the scraped manure or solids are stored for less than six months.

“Unformed settled open feedlot effluent basin” means a settled open feedlot effluent basin, other than a formed settled open feedlot effluent basin.

“Vegetative infiltration basin” or *“VIB”* means an open feedlot operation structure in which settled open feedlot effluent is discharged into a relatively flat basin area which is bermed to prevent entry or discharge of surface water flows and is planted to permanent vegetation. An extensive tile system installed at a depth of three to five feet is used to collect infiltrated settled open feedlot effluent from the VIB and discharge it into a VTA for further treatment. As opposed to wetlands, which are designed to maintain a permanent water level, a VIB is designed to maximize water infiltration into the soil and thus normally will have standing water for only short periods of time. Removal of settleable solids is required prior to discharge of open feedlot effluent into the VIB. Soil suitability is essential to ensure adequate filtration and treatment of pollutants. Periodic harvesting of vegetation is required.

“Vegetative treatment area” or *“VTA”* means an open feedlot operation structure in which settled open feedlot effluent is discharged into areas which are level in one dimension and have a slight slope (less than 5 percent) in the other dimension and are planted to relatively dense permanent vegetation. Settled open feedlot effluent must be discharged evenly across the top width of the VTA and allowed to slowly flow downslope through the VTA. Level spreaders or other practices may be required to maintain even flow throughout the length of the VTA. Management to maintain a dense vegetation cover is required, as is periodic harvesting of vegetation.

“Water of the state” means any stream, lake, pond, marsh, watercourse, waterway, well, spring, reservoir, aquifer, irrigation system, drainage system, and any other body or accumulation of water, surface or underground, natural or artificial, public or private, which are contained within, flow through or border upon the state or any portion thereof.

“Waters of the United States” means the same as defined in 40 CFR 122.2 as that section existed on July 1, 2005.