

# Permitting Animal Feeding Operations in Missouri



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## **Introduction**

In Missouri, the Department of Natural Resources (MODNR) is delegated authority by the USEPA to enforce the Concentrated Animal Feeding Operation (CAFO) provisions of the Clean Water Act. MODNR issues National Pollution Discharge Elimination System (NPDES) permits to operators of animal feeding operations. The State of Missouri has promulgated rules that set forth regulations for Concentrated Animal Feeding Operations (CAFO's).

Applicable Rules of the Department of Natural Resources include:

- Title 10 CSR 20-2.010 Definitions
- Title 10 CSR 20-6.300 Permits – Concentrated Animal Feeding Operations
- Title 10 CSR 20-8.300 Design Guides – Manure Storage Regulations
- Title 10 CSR 20-14.010 to 14.030 Concentrated Animal Feeding Operations and Waste Management System Operations

Revisions to parts 20-6.300 and 20-8.300 became effective in 2012. In addition, House Bill (HB) 28, which became effective on August 28, 2013 has opened both rules for changes. The changes proposed are reflected in discussions that follow.

In general, only Class I CAFO's and Class II operations that discharge or have been designated CAFO's are required to obtain an operation permit. Livestock facility operators smaller than Class I may also voluntarily apply for an operation permit.

Construction Permits are only required for Class I CAFO's that propose to construct one or more earthen manure storage basins to hold, contain, store or treat, domestic, agricultural or industrial process water.

Construction Permits are not required for Class II or smaller operations or for construction of facilities other than earthen manure storage basins to hold, contain, store or treat domestic, agricultural or industrial process water at any operation. Solid manure systems (poultry buildings, open lots, stacking pads and other similar structures), even if floor is compacted earth are not subject to construction permitting.

The following information is presented to assist livestock producers in understanding the NPDES permitting process in Missouri. This presentation does not contain all of the information and details of NPDES permitting in Missouri. In addition, information contained in this presentation is subject to change. Producers are encouraged to contact the Missouri Department of Natural Resources for questions regarding NPDES permits and/or Construction Permits and/or experienced consulting agricultural engineers.

For further information a producer may visit MODNR at: [www.dnr.mo.gov/env/wpp/cafo/](http://www.dnr.mo.gov/env/wpp/cafo/)

## **Definition of Concentrated Animal Feeding Operation (CAFO)**

A livestock/animal facility/operation is, by Clean Water Act (CWA) definition an Animal Feeding Operation (AFO) if the following two conditions are met:

- Animals have been, are, or will be stabled or confined and fed or maintained for a total of 45 days in any 12 month period and
- Crops, vegetation, forage growth or post-harvest residues are not sustained in the normal growing season over any portion of the lot or facility.

The State of Missouri has further qualified the second condition to read:

- A ground cover of vegetation Crops, vegetation is not sustained over at least 50% of the confinement area.

A CAFO is any AFO which:

1. Missouri Class I. Confines 1000 or more “animal equivalent units” of one animal type at one operation location. (See Table 1.1 and 1.2 for calculating animal equivalent units for livestock types), or
2. Missouri Class II. Confines between 300 and 1000 animal equivalent units and discharges directly or through a man made device into waters of The State/US, or is designated a CAFO by the Missouri Department of Natural Resources, or
3. Unclassified. An AFO that confines less than 300 animal equivalent units and is not designated a CAFO by the Missouri Department of Natural Resources. Missouri does not assign a class for AFO’s with less than 300 animal equivalent units.

Table 1.1: Animals per Animal Equivalent Unit (AEU's)

1.0	Beef cow, feeder, veal calf, cow/calf pair and dairy heifer
0.5	Horse
0.7	Mature Dairy cows
2.5	Swine weighing over 55 lbs
10	Swine weighing under 55 lbs
10	Sheep, lambs, and meat or dairy goats
30	Chicken laying hens, pullets, and boilers with a wet handling system
55	Turkeys in growout phase
82	Chicken Laying hens without a wet handling system
125	Chicken Broiler and pullets, and turkey poults in brood phase, all without a wet handling system

Missouri has, also, further broken Class I CAFO’s into three categories:

- Class IA – 7000 or more animal equivalent units
- Class IB – 3000 to 6999 animal equivalent units
- Class IC – 1000 to 2999 animal equivalent units

Table 1.2: Animal Class Category Animal Equivalent Unit and Animal Number Thresholds

<b>Animal Class Category</b>	<b>Class IA</b>	<b>Class IB</b>	<b>Class IC</b>	<b>Class II</b>
Animal Equivalent Units	7,000	3,000 to 6,999	1,000 to 2,999	300 to 999
Beef cow, feeder, veal calf, cow/calf pair and dairy heifer	7,000	3,000 to 6,999	1,000 to 2,999	300 to 999
Horse	3,500	1,500 to 3,499	500 to 1,499	150 to 499
Mature Dairy cows	4,900	2,100 to 4,899	700 to 2,099	200 to 699
Swine weighing over 55 lbs	17,500	7,500 to 17,499	2,500 to 7,499	750 to 2,499
Swine weighing under 55 lbs	70,000	30,000 to 69,999	10,000 to 29,999	3,000 to 9,999
Sheep, lambs, and meat or dairy goats	70,000	30,000 to 69,999	10,000 to 29,999	3,000 to 9,999
Chicken laying hens, pullets, and boilers with a wet handling system	210,000	90,000 to 209,999	30,000 to 89,999	9,000 to 29,999
Turkeys in growout phase	385,000	165,000 to 384,999	55,000 to 164,999	16,500 to 54,999
Chicken Laying hens without a wet handling system	574,000	246,000 to 573,999	82,000 to 245,999	24,500 to 81,999
Chicken Broiler and pullets, and turkey poults in brood phase, all without a wet handling system	875,000	375,000 to 874,999	125,000 to 374,999	37,500 to 124,999

### AEU Notes:

- The animal class (I, II, or unclassified) of an operation is based on the operating level of the individual animal type with the most AEU's. Species are not added together for initial determination of Class. To calculate the number of AEU's for a given number of animals divide the number of animals by the appropriate value in Table 1.2.
- If there are more than 1000 AEU's of one animal type (Operation is a Class I), the AEU's of all confined animals are summed to determine if the operations Animal Class Category (IA, IB or IC).
- A wet handling system is defined as a system which contains more than 75% moisture content or has free draining liquids.

### Examples:

Example 1: An operation confines 2000 feeder pigs and 400 feeder.

Swine over 55 lbs –  $2000\text{hd} / 2.5 = 800$  AEU's

Beef feeder cattle –  $400\text{hd} / 1 = 400$  AEU's

The Operation is Class II, based on 800 AEU's swine.

Example 2: An operation confines 6000 feeder pigs and 38,500 turkeys.

Swine over 55 lbs –  $6000/2.5 = 2,400$  AEU's

Turkey in growout Phase –  $38,500/55 = 700$  AEU's

The operation is Class I, based on 2,400 AEU's feeder pigs and Animal Class Category – Class IB because there are 3,100 combined AEU's.

Example 3: A cattle feedlot operation has capacity for 2,500 head.

Beef feeder Cattle –  $2,500\text{hd} / 1 = 2,500$  AEU's

The operation is Class 1C.

## Operation Permits

**All Class I CAFO's must obtain an operating permit from MODNR.**

**Animal Feeding Operations which confine less than 1000 animal equivalent units require an operating permit if they have qualifying discharges or are otherwise designated a CAFO by MODNR. Animal Feeding Operations which confine less than 1000 animal equivalent units may also voluntarily apply for an operating permit.**

An application for an operating permit form with instructions may be downloaded at:

<http://www.dnr.mo.gov/forms/780-2112-f.pdf>

Missouri DNR has issued instructions titled "PROPOSED CAFO OPERATING PERMIT PROCESS WHEN A CONSTRUCTION PERMIT IS NOT REQUIRED". This is a draft of the interim operating permit procedure that will be used until regulations in 10 CSR 20-6.300 are revised. These instructions detail producer and MODNR responsibilities, forms required and timelines for permit application and approval. A copy of these instructions is attached. These instructions may also be downloaded at:

<http://nmplanner.missouri.edu/regulations/2013-CAFO-Construction-Permit.pdf>

**All operation permits will include/require the following:**

- Meet buffer distance to existing occupied residence or public building and Neighbor Notification of all property owners within 1 ½ times the applicable “buffer distance”.
- Conduct regular inspections of facilities
- Inspection and Maintenance Record Keeping – 5 years
- Land Application Record Keeping – 5 years
- Annual Reports
- Mortality Management practices and records
- A Nutrient Management Plan, which address:
  1. Land application set back distances
  2. Application rates to minimize N and P transport
  3. Field specific assessment of N and P transport potential
  4. Nutrient management practices which comply with technical standards
  5. Annual Manure Testing
  6. Soil Testing each 5 years
  7. Mortality Management
  8. Diversion of clean water
  9. Animals having contact with the water of the state
- A Construction Permit for a proposed earthen manure storage basin to hold, contain, store or treat domestic, agricultural or industrial process water (except for Class II and smaller operations).
- Requires that construction of any system designed to hold, contain, store or treat, domestic, agricultural or industrial process water must be prepared by a Missouri, licensed Professional Engineer (P.E.) in accordance with design regulations in 10 CSR 20-8.300 and meets buffer distance and neighbor notification requirements in 10 CSR 20-6.300(3) (B) and (C).

MODNR offers two general permit options for permitting animal facilities:

- A NPDES General Permit, which allows for discharges during “Catastrophic Storm Events” or during “Chronic Weather Events.
- A State CAFO General Permit, which is a no-discharge permit.

Class IA CAFO’s must apply for a NPDES Site Specific permit. In addition to the other requirements for all permits and NPDES General Permits, the Site Specific Permit will also require:

- Flush wet handling systems will require inspections not less than each 12 hours.
- Unauthorized discharges across property lines or to waters of the state must be reported within 24 hours.
- An Odor Control Plan must be approved and implemented.
- The fee for a Site Specific NPDES Permit is \$5000 per year.

The following Table 2 compares the requirements (in addition to the above) of the NPDES General Permits and State CAFO General Permits.

Table 2: A Comparison of General Permits

NPDES General Permit	State CAFO General Permit
<u>Discharges</u>	
<ul style="list-style-type: none"> <li>• Allowed if the result of:               <ol style="list-style-type: none"> <li>1. Catastrophic Storm Event – a precipitation event that exceeds the 25 year, 24 hour storm event, or</li> <li>2. A Chronic Weather Event – based on evaluation of the 1 in 10 year return rainfall frequency over 1 day, 10 day, 90 day, 180 day and 365 day operating period and determined by the University of Missouri Climate Center.</li> </ol> </li> <li>• In the event of a Catastrophic or Chronic Weather Event, the operator should follow guidance in MODNR’s “Wet Weather Management Practices for CAFO’s”.</li> </ul>	<ul style="list-style-type: none"> <li>• No discharges are allowed.</li> <li>• In the event of a Catastrophic or Chronic Weather Event, the operator should follow guidance in MODNR’s “Wet Weather Management Practices for CAFO’s”.</li> </ul>
<u>Nutrient Management Plan (NMP)</u>	
<ul style="list-style-type: none"> <li>• A NMP must be submitted</li> <li>• Portions of the NMP will be incorporated into the permit</li> <li>• Changes to the NMP must be submitted and may require a modification to the permit.</li> </ul>	<ul style="list-style-type: none"> <li>• A NMP must be developed, but submission is only required with a new permit application.</li> <li>• NMP is not incorporated into the permit.</li> <li>• Changes to the NMP do not require a modification to the permit.</li> </ul>
<u>Public Notice</u>	
<ul style="list-style-type: none"> <li>• A 15 day public notice is required on the MODNR website. Posted are the draft permit and the NMP.</li> <li>• Modifications to the permit or NMP require an additional 15 day notice.</li> </ul>	<ul style="list-style-type: none"> <li>• No Public Notice</li> </ul>
<u>Annual Report</u>	
<ul style="list-style-type: none"> <li>• An annual report is due February 15 of each year for the previous calendar year.</li> </ul>	<ul style="list-style-type: none"> <li>• An annual report is due February 15 of each year for the previous calendar year.</li> <li>• Fewer reporting requirements.</li> </ul>

## Construction Permits

Construction Permits are only required for Class I CAFO’s that propose to construct one or more earthen manure storage basins to hold, contain, store or treat, domestic, agricultural or industrial process water.

An application for a construction permit form with instructions may be downloaded at:

<http://www.dnr.mo.gov/forms/780-0725-f.pdf>

Construction Permits are not required for Class II or smaller operations or for construction of facilities other than earthen manure storage basins to hold, contain, store or treat domestic, agricultural or industrial process water at any operation. Construction permits are not required for solid manure systems (poultry buildings, open lots, stacking pads and other similar structures), even if floor is compacted earth.

However, all new construction of manure handling and storage facilities for permitted CAFO’s must comply with several conditions of [10 CSR 20-8.300 Manure Storage Design Requirements](#). Documentation must be prepared by a Missouri Licensed Professional Engineer.

All new construction must also obtain a land disturbance permit, if 1 acre or more of land is likely to be disturbed during construction activities. For more information visit MODNR:

<http://www.dnr.mo.gov/env/wpp/stormwater/sw-land-disturb-permits.htm>

In addition, several Missouri counties and townships have enacted Health or Zoning ordinances which may restrict the development of livestock facilities. A listing of counties and townships and ordinances is attached. In addition, the lists can be downloaded from:

<http://nmplanner.missouri.edu/regulations/mocountyrules/>

Table 3 below lists requirements and prohibitions for Class I CAFO's that propose to construct one or more earthen manure storage basins to hold, contain, store or treat, domestic, agricultural or industrial process water.

Table 3: Requirements for Earthen manure storage.

CAFO Class	Requirements
Class IA	<ul style="list-style-type: none"> <li>• Construction Permit Required</li> <li>• Must include a geohydrologic evaluation</li> <li>• Prohibited from the watersheds of Jack's Fork, Current and Eleven Points Rivers.</li> <li>• If located in               <ol style="list-style-type: none"> <li>1. Watersheds for public Drinking water lakes (defined in 10 CSR 20-70.031, Table G);</li> <li>2. Watersheds located upstream away from the dam from all drinking water intake structures on lakes including the watershed of Table Rock Lake;</li> <li>3. Areas in the watershed and within 5 miles upstream of any stream or river drinking water intake structure, other than those intake structures on the Missouri and Mississippi Rivers; and</li> <li>4. Watersheds of the Current River (head waters to northern Ripley County line), Eleven Point River (headwaters to Highway 142) and Jacks Fork (All)</li> </ol> </li> <li>• A spill prevention plan must be submitted to Mo DNR for approval.</li> <li>• Maintain a 3,000 feet buffer between nearest animal containment building or waste holding basin and any existing public building or occupied residence (not owned by the CAFO owner/operator).</li> </ul>
Class IB	<ul style="list-style-type: none"> <li>• Construction Permit Required</li> <li>• Must include a geohydrologic evaluation</li> <li>• Maintain a 2,000 feet buffer between nearest animal containment building or waste holding basin and any existing public building or occupied residence (not owned by the CAFO owner/operator).</li> </ul>
Class IC	<ul style="list-style-type: none"> <li>• Construction Permit Required</li> <li>• Must include a geohydrologic evaluation</li> <li>• Maintain a 1,000 feet buffer between nearest animal containment building or waste holding basin and any existing public building or occupied residence (not owned by the CAFO owner/operator).</li> </ul>



## **Example Scenarios**

### **Scenario 1: Class II AFO**

A beef cattle producer with 600 head of feeder calves (600/1 = 600 AEU's) wishes to construct a deep bed pack barn to confine the calves to replace his earthen feedlots. The proposed facility is a mono-slope barn with a concrete scrape alley along the feed bunk where manure is handled as a solid and is scraped into a concrete manure stack located under the roof at the ends of the building or between pens. The remaining pen area is a bedded manure pack over a compacted soil (clay) base. There will be no outside lots. Producer has not been designated a CAFO by MODNR.

Beef feeder cattle – 600hd / 1 = 600 AEU's

The operation is a Class II AFO because it has less than 1000 AEU's. No operation permit is necessary. A construction permit is not required. A Professional Engineer is not required unless an operation permit is desired. If the producer desires to voluntarily apply for a State CAFO General Permit, the siting and design of the facility will need to comply with the provisions of 10 CFR 20-8.300. The producer may need to comply with county or township ordinances and may need to apply for a land disturbance permit if an acre or more of land is to be disturbed during construction.

If this operation was designated a CAFO by MODNR, it would be a Class II CAFO and need an operating permit and a Professional engineer to document compliance with 10 CSR 20-8.300.

### **Scenario 2: Class IC CAFO**

A dairy producer plans to expand an existing dairy operation to 640 lactating cows and 160 dry cows. Young stock is raised at a separate facility not part of the milking herd. The producer plans to construct an earthen waste storage pond for wastes from the expanded facility. AEU's are calculated by dividing the number of head by the number of animals per AEU.

Animal Species	Number of Head	Animals per Animal Equivalent Unit (AEU)	AEUs
Lactating cows	640	0.7	914
Dry cows	<u>160</u>	0.7	<u>229</u>
Totals	800	-	1,143

The operation will be a Class IC CAFO because the total animals is between 700-2,099. An operation permit is required. Since the facility will have a waste storage pond that is exposed to precipitation, the operator may wish to consider applying for a NPDES General Permit instead of the State CAFO General Permit. A Professional Engineer is required for the documentation. A construction permit will be required for the earthen waste storage pond. The producer may need to comply with county or township ordinances and may need to apply for a land disturbance permit if an acre or more is to be disturbed during construction.

### **Scenario 3: Class IC CAFO**

The dairy operator above decides to store wastes in a tank, instead of an earthen waste storage pond.

The operation will still be a Class IC CAFO. An operation permit is required. Since the facility will have an outside tank that is exposed to precipitation, the operator may wish to consider applying for a NPDES General Permit. A construction permit will not be required for the waste storage tank. Project must be designed by a P.E. licensed in Missouri, in accordance with design regulations in 10 CSR 20-8.300 and meets buffer distance and neighbor notice requirements in 10 CSR 20-6.300(3)(B) & (C). The producer may need to comply with county or township ordinances and may need to apply for a land disturbance permit if an acre or more is to be disturbed during construction.

### **Scenario 4: Class IA CAFO**

A producer proposes a new beef finishing facility with 6 buildings with deep pits for manure and wastewater storage. Each building will have a capacity of 1200 head.

Beef Finisher – (6 Buildings @ 1200hd) / 1.0 = 7,200 AEU's

The proposed operation will be a Class IA CAFO. A site specific NPDES operating permit will be required. A construction permit may not be required. Project must be designed by P.E. licensed in Missouri, in accordance with design regulations in 10 CSR 20-8.300 and meets buffer distance and neighbor notice requirements in 10 CSR 20-6.300(3)(B) & (C). The producer may need to comply with county or township ordinances and will need to apply for a land disturbance permit since an acre or more is to be disturbed during construction.

Agricultural engineers James L. Evans, PE and Jason E. Olmstead, PE are Missouri licensed professional engineers with Maurer-Stutz, Inc. Please feel free to contact them at 309-693-7615 for questions or to discuss the services Maurer-Stutz, Inc. has to offer for design or permitting assistance at your facility.

**Summary of Missouri county health ordinances that impose additional restrictions on animal feeding operations (Updated August 2007)**

County	Classification of CAFO	Air Quality Restrictions	Land Required for Operation	Land Application Setbacks	Facility Setbacks	Lagoon or Feedlot Setbacks	Other Setbacks	County Fees	Financial Security
<b>Adair</b>	≥ 300 Animal Units (AU)	Yes	1 acre per 4 AU for wet system; 1 acre per 8 AU for dry system; continuous land tract for wet system	100 to 1,000 feet for dwellings, public areas, sinkholes, strip pits, wells, springs, streams, and water supply sources	¼ to 1 mile from another CAFO	2,000 feet from an existing residence	1,000 feet to 2 miles from a CAFO to a occupied dwelling or populated area, increase ¼ mile per 500 AU over 2000 AU	\$1,000 to \$10,000	\$30,000 to \$70,000 cash or surety bond; Extra \$20,000 per 500 AU over 2000 AU
<b>Caldwell</b>	≥ 300 Animal Units (AU)	Yes	1 acre per 4 AU for wet system; 1 acre per 8 AU for dry system; continuous land tract for wet system	100 to 1,000 feet for dwellings, public areas, sinkholes, strip pits, wells, springs, streams, and water supply sources	¼ to 1 mile from another CAFO	2,000 feet from an existing residence	1,000 feet to 2 miles from a CAFO to a occupied dwelling or populated area, increase ¼ mile per 500 AU over 2,000 AU	\$1000 to \$10,000	\$30,000 to \$70,000 cash or surety bond; Extra \$20,000 per 500 AU over 2,000 AU
<b>Camden</b>	≥ 250 Animal Units (AU)	Yes	1 acre per 4 AU for wet system; 1 acre per 8 AU for dry system;	½ to 5 mile setbacks from dwelling, lagoons, sinkholes, caves, human supply structures, water sources	½ to 2 miles from another CAFO	1 to 5 miles from dwellings, public areas, water supply sources	None	\$1 per AU original and annual renewal for a permit	\$100 per AU, cash or surety bond
<b>Harrison</b>	≥ 300 Animal Units (AU)	Yes	1 acre per 4 AU for wet system; 1 acre per 8 AU for dry system;	100 to 1,000 feet for dwellings, public areas, sinkholes, strip pits, wells, springs, streams, and water supply sources	¼ to 1 mile from another CAFO	1,000 to 3,000 feet from public building or dwelling	100 feet from property line, public use area or conservation area	\$1000 to \$10,000	\$15,000 to \$100,000 cash or surety bond
<b>Henry</b>	≥ 1,000 Animal Units (AU)	Yes	None	300 to 1,000 feet from property lines, dwellings, buildings, water sources	None	3,000 feet from occupied dwelling	None	Original or renewal fee is \$0.71 per AU; Permit fees range from \$6,000 to \$12,500	None
<b>Knox</b>	≥ 1,000 Animal Units (AU)	Yes	1 acre per 4 AU for wet system; 1 acre per 8 AU for dry system;	100 to 1,000 feet for dwellings, sinkholes, strip pits, wells, springs, streams, and water supply sources	½ to 2 miles from another CAFO	2,000 feet from an existing residence	½ to 2 miles from a CAFO to a occupied dwelling or populated area, increase ¼ mile per 500 AU over 2,000 AU	\$1000 to \$10,000	\$30,000 to \$70,000 cash or surety bond; Extra \$20,000 per 500 AU over 2,000 AU
<b>Linn</b>	≥ 300 Animal Units (AU)	Yes	1 acre per 4 AU for wet system; 1 acre per 8 AU for dry system; continuous land tract for wet system	100 to 1,000 feet for dwellings, sinkholes, strip pits, wells, springs, streams, and water supply sources	¼ to 1 mile from another CAFO	2,000 feet from an existing residence	1,000 feet to 2 miles from a CAFO to a occupied dwelling or populated area; increase ¼ mile per 500 AU over 2,000 AU	\$1000 to \$10,000	\$30,000 to \$70,000 cash or surety bond; Extra \$20,000 per 500 AU over 2,000 AU
<b>Livingston</b>	≥ 300 Animal Units (AU)	Yes	1 acre per 4 AU for wet system; 1 acre per 8 AU for dry system;	100 to 1,000 feet for dwellings, sinkholes, strip pits, wells, springs, streams, and water supply sources	¼ to 1 mile from another CAFO	1,000 to 3,000 feet for public building or dwelling	100 feet from property line, public use area or conservation area	\$1000 to \$10,000	\$15,000 to \$100,000 cash or surety bond

County	Classification of CAFO	Air Quality Restrictions	Land Required for Operation	Land Application Setbacks	Facility Setbacks	Lagoon or Feedlot Setbacks	Other Setbacks	County Fees	Financial Security
<b>Macon</b>	≥ 300 Animal Units (AU)	Yes	1 acre per 4 AU for wet system; 1 acre per 8 AU for dry system;	100 feet to ¼ mile from dwellings, wells, sinkholes, strip pits, and water sources	¼ to 2 miles from another CAFO	None	¼ mile to 1 mile from a CAFO to a occupied dwelling or populated area, increase ¼ mile per 500 AU over 2,000 AU	\$1000 to \$10,000; Renewal Fee is \$25 each year	\$10,000 to \$70,000 cash or surety bond; Extra \$20,000 per 500 AU over 2,000 AU
<b>Nodaway</b>	≥ 300 Animal Units (AU)	Yes	1 acre per 4 AU for wet system; 1 acre per 8 AU for dry system; continuous land tract for wet system	100 to 1000 feet for dwellings, sinkholes, strip pits, wells, springs, streams, and water supply sources	¼ to 1 miles from another CAFO	2,000 feet from an existing residence	1000 feet to 2 miles from a CAFO to a occupied dwelling or populated area, increase ¼ mile per 500 AU over 2,000 AU	\$1000 to \$10,000	\$30,000 to \$70,000 cash or surety bond; Extra \$20,000 per 500 AU over 2,000 AU
<b>Pettis</b>	≥ 300 Animal Units (AU)	No	1 acre per 4 AU for wet system; 1 acre per 8 AU for dry system; continuous land tract for wet system	50 feet to ¼ mile from dwellings, sinkholes, strip pits, water sources	¼ to 1 mile from another CAFO	None	1000 feet to 2 miles from a CAFO to a occupied dwelling, increase ¼ mile per 500 AU over 2,000 AU	\$5 for permit	None
<b>Platte</b>	≥ 300 Animal Units (AU)	Yes	1 acre per 4 AU for wet system; 1 acre per 8 AU for dry system;	100 to 1000 feet for dwellings, public areas, sinkholes, strip pits, wells, springs, streams, and water supply sources	¼ to 1 ½ miles from another CAFO, increase ¼ mile each 500 over 7000 AU	None	1 to 2 miles from populated area, increase ¼ mile for each 500 AU over 7,000 AU	\$1000 to \$10,000; \$1 per AU over 10,000 AU; Renewal is \$100 to \$500	\$1,000 to \$150,000 surety bonds or insurance; \$20,000 extra each 500 AU over 7,000 AU
<b>Ralls</b>	≥ 300 Animal Units (AU)	No	None	50 to 500 feet for dwellings, public areas, sinkholes, strip pits, wells, springs, streams, and water supply sources	None	None	1 mile from a CAFO to populated area; 2 miles from a CAFO to Mark Twain Lake; 1000 feet to ¾ mile from a CAFO to a occupied dwelling, increase ¼ mile per 500 AU over 2,000 AU	\$500 for 5 year permit	None
<b>Schuyler</b>	≥ 300 Animal Units (AU)	Yes	1 acre per 4 AU for wet system; 1 acre per 8 AU for dry system;	100 to 1000 feet for dwellings, public areas, sinkholes, strip pits, wells, springs, streams, and water supply sources	¼ to 1 mile from another CAFO	2,000 feet from an existing residence	2,000 feet to 5,000 feet from a CAFO to a occupied dwelling, increase 2,000 feet per 500 AU over 2,000 AU	\$250 to \$10,000	<b>Lagoons</b> \$30,000 to \$70,000 cash or surety bond; Extra \$20,000 per 500 AU over 2,000 AU <b>Cement Pits</b> \$50,000 for Class I and \$10,000 per 500 AU over 2,000 AU
<b>Scotland</b>	≥ 300 Animal Units (AU)	Yes	Shall own or lease 1 acre per 4 AU for wet system; 1 acre per 8 AU for dry system; continuous land tract for wet system	100 to 1000 feet for dwellings, sinkholes, strip pits, wells, springs, streams, and water supply sources	¼ to 1 mile from another CAFO	2,000 feet from an existing residence	1000 feet to 2 miles from a CAFO to a occupied dwelling or populated area, increase ¼ mile per 500 AU over 2,000 AU	\$1000 to \$10,000	\$30,000 to \$70,000 cash or surety bond; Extra \$20,000 per 500 AU over 2,000 AU

**Summary of Missouri zoning ordinances that impose additional restrictions on animal feeding operations. (Updated August 2007)**

County or Township	Has restrictions of livestock to certain districts	Maximum Concentration of Animals in Township or County	Setbacks	County or Township Fees	Other
<b>Barton County – Richland Township</b>	Yes	500 cattle or sheep per 160 acres and/or 2,000 per 640 acres; 800 hogs per 160 acres and/or 3,200 per 640 acres; 2,000 poultry per 160 acres and/or 8,000 per 640 acres	350 cattle or sheep per 160 acres and/or 1,400 per 640 acres; 600 hogs per 160 acres and/or 2,400 per 640 acres; 1,500 poultry per 160 acres and/or 6,000 per 640 acres must be 5,280 from a residence or dwelling.	None	None
<b>Barton County – Doylesport Township</b>	Yes	500 confined cattle or sheep per 160 acres and/or 2,000 per 640 acres; 2,500 confined hogs per 160 acres and/or 10,000 per 640 acres; 20,000 confined poultry per 160 acres and/or 80,000 per 640 acres	None	None	None
<b>Cass County</b>	Yes	None	None	Special Use Permit may be required; \$10,000 for commercial feedlot	CAFOs subject to site plan review
<b>Cedar County</b>	No	None	None	None	CAFOs with more than 250 AU may be declared a nuisance.
<b>Clay County</b>	Yes	Animal production and accessory raising of farm animals shall be allowed only on lots or parcels having a minimum area of at least 20 acres.	All buildings used to house farm animals are set back at least 100 feet from the front property line and at least 50 feet from side and rear property lines.	None	Feedlots are permitted on Agricultural zoned land subject to DNR regulations and with the approval of a Conditional Use Permit.
<b>Dekalb County - Colfax Township</b>	Yes	None	Confinement buildings and sewage disposal systems must be at least ¼ mile from the nearest residence	None	Must have an anaerobic lagoon system
<b>Greene County</b>	Yes	Livestock confinement operations must seek a conditional use permit to be approved by zoning board if the operations size is larger than: 150 mature dairy cows 500 feeder cattle, swine and horses 1,000 sheep, lambs, and goats 10,000 chickens or turkeys.	Buildings and confinement areas must be at least 1,320 feet from residential/zoning district with density of greater than one unit per three acres; 600 feet from a dwelling at a density of less than one unit per three acres; 200 feet from property lines	None	None
<b>Henry County - White Oak Township</b>	Yes	500 confined cattle or sheep per 160 acres and/or 2,000 per 640 acres; 1,500 confined hogs per 160 acres and/or 6,000 per 640 acres; 20,000 confined poultry per 160 acres and/or 80,000 per 640 acres	CAFOs with > 4,000 poultry; >250 cattle or sheep; or 1,100 hogs must have 4,000 feet from a residential district and outside a 1,000 foot radius from other landowners.	\$25,000 cash or surety bond for 10 acre/foot lagoon. Each acre/foot above requires an additional \$25,000	None
<b>Henry County - Walker Township</b>	Yes	500 confined cattle or sheep per 160 acres and/or 2,000 per 640 acres; 1,500 confined hogs per 160 acres and/or 6,000 per 640 acres; 20,000 confined poultry per 160 acres and/or 80,000 per 640 acres	CAFOs with > 4,000 poultry; >250 cattle or sheep; or 1,100 hogs must have 4,000 feet from residential district and outside a 1,000 foot radius from other landowners.	\$25,000 cash or surety bond for 10 acre/foot lagoon. Each acre/foot above requires an additional \$25,000	None

County or Township	Has restrictions of livestock to certain districts	Maximum Concentration of Animals in Township or County	Setbacks	County or Township Fees	Other
Henry County - Tebo Township	Yes	500 confined cattle or sheep per 160 acres and/or 2,000 per 640 acres; 1,500 confined hogs per 160 acres and/or 6,000 per 640 acres; 20,000 confined poultry per 160 acres and/or 80,000 per 640 acres	CAFOs with > 4,000 poultry; >250 cattle or sheep; or 1100 hogs must have 4,000 from a residential district and outside a 1000 feet radius from other landowners.	\$25,000 cash or surety bond for 10 acre/foot lagoon. Each acre/foot above requires an additional \$25,000. Cash or surety bond is required for >4,000 poultry; >1,100 hogs; or 250 head of cattle or sheep for the assessed evaluation of the facility	None
Henry County - Honey Creek Township	Yes	500 confined cattle or sheep per 160 acres and/or 2,000 per 640 acres; 1500 confined hogs per 160 acres and/or 6,000 per 640 acres; 20,000 confined poultry per 160 acres and/or 80,000 per 640 acres	CAFOs with > 4,000 poultry; >250 cattle or sheep; or 1100 hogs must have 4,000 residential district and outside a 1,000 feet radius from other landowners.	\$25,000 cash or surety bond for 10 acre/foot lagoon. Each acre/foot above requires an additional \$25,000	None
Henry County - Windsor Township	Yes	500 confined cattle or sheep per 160 acres and/or 2,000 per 640 acres; 1,500 confined hogs per 160 acres and/or 6000 per 640 acres; 20,000 confined poultry per 160 acres and/or 80,000 per 640 acres	None	None	None
Henry County - Bogard Township	Yes	500 confined cattle or sheep per 160 acres and/or 2,000 per 640 acres; 1500 confined hogs per 160 acres and/or 6,000 per 640 acres; 2,000 confined poultry per 160 acres and/or 80,000 per 640 acres	CAFOs with > 4,000 poultry; >250 cattle or sheep; or 1100 hogs must have 4,000 feet from residential district and outside a 1,000 feet radius from other landowners.	\$25,000 cash or surety bond for 10 acre/foot lagoon. Each acre/foot above requires an additional \$25,000	None
Putnam County - Sherman Township	Yes	None	Lagoons and feedlots must be 1,400 to 5,280 feet from residence, depending on lagoon size.	\$25,000 cash or surety bond for 10 acre/foot lagoon. Each acre/foot above requires an additional \$25,000	None
Putnam County - York Township	Yes	None	Lagoons and feedlots must be 1,400 to 5,280 feet from residence, depending on lagoon size.	\$25,000 cash or surety bond for 10 acre/foot lagoon. Each acre/foot above requires an additional \$25,000	None
Putnam County - Lincoln Township	Yes	None	Lagoons and feedlots must be 1,400 to 5,280 feet from residence, depending on lagoon size; 300 to 1,000 feet from certain water sources ; and 100 from public roadway	\$25,000 cash or surety bond for 10 acre/foot lagoon. Each acre/foot above requires an additional \$25,000	Installation of monitoring wells, Air Quality Restrictions

## **PROPOSED CAFO OPERATING PERMIT PROCESS WHEN A CONSTRUCTION PERMIT IS NOT REQUIRED**

House Bill (HB) 28, which became effective on August 28, 2013 contained provisions that changed construction permitting requirements. Construction permits are now **only** required for the construction of an earthen storage structure to hold, convey, contain, store, or treat domestic, agricultural, or industrial process wastewater. Construction of all other point source systems designed to hold, convey, contain, store, or treat domestic, agricultural, or industrial process waste must be designed by a professional engineer registered in Missouri in accordance with design regulations. HB 28 also changed the fee for non-substantive permit modifications such as operation name change or ownership transfer from \$150 to \$100. All other permit fees remain the same.

In response to these changes, the Department of Natural Resources has implemented an interim process for applications for a new or modified CAFO operating permit that does not require a construction permit. This document will serve as guidance until regulations in 10 CSR 20-6.300 and 10 CSR 20-8.300 can be revised. This interim process includes changes as to when applications are to be submitted and the additional supporting documents that are required. The requirements for buffer and setback distances and neighbor notice have not changed.

### **Prior to Starting Construction**

CAFO Owner/Operator Responsibilities:

- 1) Project must be designed by P.E. licensed in Missouri, in accordance with design regulations in 10 CSR 20-8.300 and meets buffer distance and neighbor notice requirements in 10 CSR 20-6.300(3)(B) & (C). Obtain land disturbance permit if required.
- 2) Construction can begin at any time; however, the department recommends that the owner/operator receives the effective CAFO operating permit prior to the start of construction.

### **Prior to Submitting Operating Permit Application**

CAFO Owner/Operator Responsibilities:

- 1) Develop a Nutrient Management Plan (NMP).
- 2) Send neighbor notice letters to neighbors, county and department. Prepare Form W and other required permit documents.

Department Responsibilities:

- Review neighbor notice letter for compliance. Inform applicant if it does not meet requirements.
- Start a file for neighbor notice comments.

### **Operating Permit Application Requirements and Permit Issuance**

CAFO Owner/Operator Responsibilities:

- 1) Submit Form W and appropriate permit fee;
  - a) General permit applications should be submitted at least 90 days prior to the proposed starting date of operation, or
  - b) Site specific permit applications should be submitted at least 180 days prior to the proposed starting date of operation.

- 2) Submit other required supporting documents,
  - a) Title/cover page of engineering documents including name and address of the operation, date prepared, name and address of firm preparing the report, seal and signature of the engineer, and a statement indicating the project was designed in accordance with 10 CSR 20-8.300 and 10 CSR 20-6.300.
  - b) Narrative project summary. This shall include a summary of the operation with number of confinement buildings, the design capacity in animal units and animal numbers for each type of animal, and an explanation of the manure management system and any proposed modifications
  - c) Calculations showing the amount of manure generated annually, storage volume calculations and days of storage of all manure storage structures, including mortality composter
  - d) An aerial and topographic map showing the extent of the production area including;
    - i) all confinement buildings, open lots, manure storage structures,
    - ii) surface water and areas subject to a one hundred year flood event within or adjacent to the production area, and
    - iii) production area setback distances in accordance with 10 CSR 20-8.300(5)(B).
  - e) Nutrient Management Plan;
    - i) NPDES permit – applications for a new or modified permit shall include the operations nutrient management plan, or
    - ii) State no-discharge permit – applications for a new permit shall include the operations nutrient management plan.
    - iii) For export only operations, completing parts 5-11 of Form W meets this requirement.
  - f) Applications for Class I CAFOs shall also include;
    - i) Proof of neighbor notice to all parties listed in 10 CSR 20-6.300(3)(C)2 and a maps that meets the requirement of 10 CSR 20-6.300(3)(C)4; and
    - ii) All comment letters received in response to neighbor notice by the CAFO owner, operator or their representative in accordance with 10 CSR 20-6.300(3)(C). Comment letters sent to the department will be added to the application upon receipt. An application will not be complete until the thirty (30) day neighbor notice comment period has ended.
- 3) Correct any permit application deficiencies identified in comment letter.

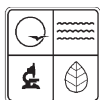
Department Responsibilities:

- Thirty day neighbor notice comment period will start upon receipt of application.
- Review application and permit documents for completeness and for compliance with regulations. Send letter to owner/operator and P.E. confirming that application is complete or requesting additional information.
- Prepare NPDES permit Attachment A and land application Information for 15 day public comment period. No public comment is required for State no-discharge permit.
- Add neighbor notice comment letters to application at upon completion of 30 day neighbor notice comment period to complete application.
- Place NPDES permit on 15 day public comment period.
- Respond to comments received during neighbor notice and 15 day public comment period.
- May conduct site inspection prior to issuance of permit.
- When application is complete and complies with regulations, permit can be issued.

The as-built engineering certification upon completion of construction is not required for those projects that do not require a construction permit.

For further information you may contact Amanda Sappington at (573) 751-8728.















# Guide to Animal Feeding Operations











Laws passed by the General Assembly to protect water quality in Missouri designated the Missouri Department of Natural Resources as responsible for establishing rules, policies and guidelines. By establishing and enforcing standards and properly managing animal waste, we can protect our valuable water resources. Preventing contamination is the key to protecting water quality for all Missouri citizens. The following requirements regulate concentrated animal feeding operations. When an operation meets all state requirements the department is required to issue a permit to such operation.

## Rules and Laws

Requirements for Class I concentrated animal feeding operations are contained in state legislation, HB1207, under Section 261.105 and 640.700-640.755 of RSMo, supp, 1996. This law became effective June 25, 1996. Rules were issued March 31, 1999 and revised Jan. 29, 2009 and April 30, 2012 under 10 CSR 20-6.300.

**Table 1. 1 Animal Unit Equals -**

	1.0	Beef cow, feeder, veal calf, cow/calf pair and dairy heifer
	0.5	Horses
	0.7	Mature Dairy cows
	2.5	Swine weighing over 55 pounds
	10	Swine weighing under 55 pounds
	10	Sheep, lambs, and meat and dairy goats
	30	Chicken laying hens, pullets and broilers with a wet handling system
	55	Turkeys in growout phase
	82	Chicken laying hens without a wet handling system
	125	Chicken broilers and pullets, and turkey poults in brood phase, all without a wet handling system

Animal Class Category		Class IA	Class IB	Class IC	Class II
Animal unit equivalent		7,000	3,000 to 6,999	1,000 to 2,999	300 to 999
	Beef cow, feeder, veal calf, cow/calf pair and dairy heifer	7,000	3,000 to 6,999	1,000 to 2,999	300 to 999
	Horses	3,500	1,500 to 3,499	500 to 1,499	150 to 499
	Mature Dairy cows	4,900	2,100 to 4,899	700 to 2,099	210 to 699
	Swine weighing over 55 lbs.	17,500	7,500 to 17,499	2,500 to 7,499	750 to 2,499
	Swine weighing under 55 lbs.	70,000	30,000 to 69,999	10,000 to 29,999	3,000 to 9,999
	Sheep, lambs, and meat and dairy goats	70,000	30,000 to 69,999	10,000 to 29,999	3,000 to 9,999
	Chicken laying hens, pullets and broilers with a wet handling system	210,000	90,000 to 209,999	30,000 to 89,999	9,000 to 29,999
	Turkeys in growout phase	385,000	165,000 to 384,999	55,000 to 164,999	16,500 to 54,999
	Chicken laying hens without a wet handling system	574,000	246,000 to 573,999	82,000 to 245,999	24,500 to 81,999
	Chicken broilers and pullets, and turkey poults in brood phase, all without a wet handling system	875,000	375,000 to 874,999	125,000 to 374,999	37,500 to 124,999

Construction and operating permits are required for Class I CAFO animal confinement areas and waste management features. Permits are also required for any Class II CAFO that will discharge through a man-made conveyance. Prior to construction, both the construction permit and the land disturbance permit must be obtained. The operating permit must be obtained prior to placing animals in the confinement areas. Proposed permit actions are required to follow the public participation procedures outlined in 10 CSR 20-6.300.

Design and engineering requirements are located in 10 CSR 20- 8.300. Rules are available on the Missouri Secretary of State website at [www.sos.mo.gov/adrules/csr/current/10CSR/10csr.asp](http://www.sos.mo.gov/adrules/csr/current/10CSR/10csr.asp). Additional information about CAFOs is available at [www.dnr.mo.gov/env/wpp/cafo/index.html](http://www.dnr.mo.gov/env/wpp/cafo/index.html).

### **No Discharge**

In Missouri, CAFOs must be designed constructed, operated and maintained as “no-discharge” facilities. This means the operation must contain all of the wastewater to be land-applied when conditions are favorable. They are not allowed to treat and release the wastewater to streams and rivers like most communities and industries.

### **Classification of Animal Feeding Operations**

An operation is defined as a CAFO if it falls within the Class I size category and confines, stables, or feeds animals for 45 days or more in a 12 month period and a ground cover of vegetation is not sustained over at least 50 percent of the confinement area. All Class I operations must obtain a permit. Class II operations can voluntarily obtain a permit.

An AFO or CAFO’s class size is based on the operating level in animal units of an individual animal type at one operating location. After a CAFO becomes a Class I operation, the animal units of all confined animals at the operating location are summed to determine whether the operation is Class IA, IB, or IC. Operations that are smaller than the Class II category are considered unclassified. Class II and smaller operations are not required to have a permit unless the department designates an operation as a CAFO for reasons such as to correct noncompliance, (i.e. unauthorized discharge). Table 1 shows the classifications and animal number thresholds for each. As of July 2012, there were approximately 20 Class IA, 40 Class IB and 420 Class IC CAFOs operating in Missouri. Approximately 35 Class II facilities have permits.

### **Buffer Distances and Neighbor Notification**

There are minimum buffer distances required between the nearest confinement building or waste holding basin and any public building or occupied residence (see Table 2). The distances are determined by the number of animal units that will occupy the operation. The owner or operator is required to give notice to the adjoining property owners located within 1.5 times the listed buffer distance, the county governing body and the Department of Natural Resources when planning construction of a new or expanding an existing Class I CAFO.

Interested parties have at least 30 days in which to submit comments to the department. The 30 days begins either the date the neighbor notification was sent or the date the department receives the permit application, whichever date is later. Comments should be addressed to the Agriculture Unit Chief. The department reviews all comments, however, it can only consider water quality issues within the jurisdiction of the Clean Water Commission. The department will respond in writing to these comments after a permit decision has been made.

**Table 2. Permit Requirements and Buffer Distances**

<p><b>Class I</b> Permits are required for all Class I Concentrated Animal Feeding Operations. <b>Class IA - 3,000 feet buffer distance</b> - Class IA operations must obtain a site specific permit. <b>Class IB - 2,000 feet buffer distance</b> - Class IB operations must obtain a general permit. * <b>Class IC - 1,000 feet buffer distance</b> - Class IC operations must obtain a general permit. *</p> <p><b>Class II and Unclassified</b> - Buffer distance is not required.</p> <p>*Site-specific permit may be required on case-by-case basis.</p>
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**Odors from CAFOs**

Many factors affect the level of odors coming from a CAFO including size, animal type, waste storage type, prevailing winds, topography as well as other operational and environmental factors. In addition, Class IA CAFOs are required to prepare and implement an odor control plan as described by the Air Pollution Control Program under its odor emission regulations. The odor control plan requires a detailed analysis of a Class IA CAFOs odor sources and a corresponding plan to reduce odor emissions. All other sizes of CAFOs are exempt from these regulations.

Air Pollution Control Program odor emission regulations require facilities to restrict their odor emissions such that they cannot be perceived above a defined level after it leaves the facilities property. Failure to comply with the odor standard can result in a violation and penalty. The odor emission level for Missouri is defined as follows:

No person may cause, permit, or allow the emission of odorous matter in concentrations and frequencies or for durations that odor can be perceived when one volume of odorous air is diluted with seven volumes of odor-free air for two separate trials not less than 15 minutes apart within the period of one hour. This odor evaluation shall be taken at a site not at the installation.

**Nutrient Management Plans**

All CAFOs must maintain a current Nutrient Management Plan, or NMP. The plan must be field specific. The plan must address the following minimum criteria:

1. Ensure adequate storage of manure, litter and process wastewater.
2. Incorporate procedures for proper operation and maintenance of the storage facilities.
3. Ensure proper mortality management.
4. Ensure clean water is diverted from the production area.
5. Prevent direct contact of confined animals with waters of the state.
6. Ensure chemicals and other contaminants are disposed of properly.
7. Identify site specific conservation practices to be implemented.
8. Identify protocols for testing of manure, litter, process wastewater, mortality byproducts and soil. (Wastewater sources must be tested annually and soils every five years.)
9. Ensure agricultural use of the nutrients in the manure, litter, or process wastewater. (NMPs must include a field-specific assessment of the potential for nitrogen and phosphorus loss from the field to surface waters.)
10. Ensure appropriate record-keeping.

In addition, the nutrient management plan must conform to the requirements of the Missouri Concentrated Animal Feeding Operation Nutrient Management Technical Standard, or NMTS. This document is available on the Web at [www.dnr.mo.gov/env/wpp/cafo/index.html](http://www.dnr.mo.gov/env/wpp/cafo/index.html) or by contacting the Water Protection Program.

### **Best Management Practices**

Animal waste is applied as a plant nutrient and should always be managed so runoff does not occur. Best Management Practices, or BMPs, help to ensure this. The BMPs required by the permits are based on design requirements under 10 CSR 20-8.300 and the NMTS.

These BMPs require setbacks from the land application site and other features including streams, dwellings, public use areas, wells, springs and property lines. There are limitations to the rate of application, land slope of soil plant filter fields and soil conditions at the time of application. The runoff of wastewater during land application is not allowed. If runoff occurs, it is considered an unauthorized discharge and is a violation of the permit.

The land application separation distances are:

- 300 feet from losing streams, sinkholes, caves, wells, abandoned wells, water supply structures or impoundments and any other connection between surface and groundwater.
- 100\*\* feet from permanent flowing streams.
- 100\*\* feet from intermittent flowing streams.
- 50 feet from property lines.
- 100 feet from a privately owned impoundment not used as a water supply.
- 150 feet from dwellings or public use areas if applied with spray irrigation systems.
- 50 feet for application by tank wagon or solid spreader from dwellings or public use areas.

\*\* The CAFO may substitute a 35-foot wide permanent vegetative buffer as an alternative to the 100-foot setback.

### **Other Permit Requirements for Concentrated Animal Feeding Operations**

In addition to a construction and operating permit, a CAFO will need a land disturbance permit for storm water discharges from the construction sites of animal feeding operations if the area to be disturbed will total one acre or more. This permit must be obtained prior to any land clearing or grading. The land disturbance permit requires installation of best management practices to limit soil erosion and sediment movement during construction activities.

Additionally, an operation may need a Section 404, Clean Water Act, permit from the U.S. Army Corps of Engineers if it is filling or discharging material into waters of the United States, such as building a dam to impound water. The deposit of fill material in wetlands is also regulated and requires a permit under Section 404.

### **Special Requirements for Class IA Operations**

The largest CAFO operations have special requirements including site-specific permits, critical watershed requirements, and additional monitoring, inspection and reporting. Specific Class IA requirements is available at 10 CSR 20-6.300(3)(H).

## **Floodplain**

Animal waste storage structures must be located above the 100-year flood level. The U.S. Army Corps of Engineers, U.S. Department of Agriculture, Natural Resource Conservation Service and the Federal Emergency Management Agency can supply data about 100-year flood levels.

Areas with flood frequencies greater than once in 10 years should not be the only land available for land application of animal waste. Additionally, the bottom of the storage structure must be located at least 4-feet above the water table.

## **Location**

Although the department determines a proposed site meets the requirements for buffer distances, setback distances, geologic conditions for storage structure, flood plain location and distance from surface waters, the department does not have the authority to determine the appropriate site placement or mandate a site move to a new location. The department does not have zoning authority nor does the department participate in or enforce local zoning requirements.

## **Department Oversight of CAFOs**

The Missouri Department of Natural Resources is responsible for the oversight of CAFOs from an environmental stand point. The department conducts regular unscheduled inspections of permitted operations in accordance with Missouri law. In addition, any complaints received by the department are investigated. The department also reviews annual reports submitted by the operations, which are required by the permits.

## **Reporting Problems at CAFOs**

Environmental problems at CAFOs can be reported to the local Department of Natural Resources Regional Office, or in the case of an emergency, by calling the Environmental Emergency Response at 573-634-2436.

## **Public Hearings**

For any permit application, the public can request a public hearing. The department shall hold a public hearing if there is significant technical merit and concern related to the responsibilities of the Missouri Clean Water Law.

## **Public Access to Department Files**

Department files are available to the public for review under the Missouri Sunshine Law, Chapter 610, Revised Statutes of Missouri. These records are available from 8 a.m. to 5 p.m., Monday through Friday at 1101 Riverside Drive in Jefferson City, or copies can be sent for a fee. To request file information or make an appointment to review the files for a CAFO, contact the Water Protection Program at 573-751-1300 and ask to speak to the Custodian of Records.

## **Permit Appeal Process**

Any aggrieved party may appeal the department's permit decisions. Appeals must be filed with the Administrative Hearing Commission, or AHC, within 30 days of the permit issuance. Appeals must be sent to the Administrative Hearing Commission at P.O. Box 1557, Jefferson City, MO 65102 or by fax to 573-751-5018. For more questions about how to appeal a permit, contact the Administrative Hearing Commission at 573-751-2422. This commission contracts with the department to assist in the department's decision-making processes. The AHC may conduct proceedings including a trial-type hearing to make a recommended decision to the Clean Water Commission. The Clean Water Commission makes the final decision. An appeal is a legal process, and the appellant seeks to prove to the AHC that a permit was issued unlawfully.

**For more information**

**Engineering or Permit Questions**

Missouri Department of Natural Resources  
Water Protection Program  
P.O. Box 176  
Jefferson City, MO 65102-0176  
800-361-4827 or 573-751-1300 office  
573-526-1146 fax  
[waterag@dnr.mo.gov](mailto:waterag@dnr.mo.gov)  
[www.dnr.mo.gov/env/wpp/index.html](http://www.dnr.mo.gov/env/wpp/index.html)

**Odor Regulations**

Missouri Department of Natural Resources  
Air Pollution Control Program  
P.O. Box 176  
Jefferson City, MO 65102  
573-751-4817 or 800-361-4827  
[www.dnr.mo.gov/env/apcp/index.html](http://www.dnr.mo.gov/env/apcp/index.html)

**Well Drilling Questions**

Missouri Department of Natural Resources  
Water Protection Program, Wellhead Protection Section  
P.O. Box 250  
Rolla, MO 65402  
573-368-2165  
[www.dnr.mo.gov/env/wpp/wellhd/index.html](http://www.dnr.mo.gov/env/wpp/wellhd/index.html)