

PART 651 - AGRICULTURAL WASTE MANAGEMENT FIELD HANDBOOK

Chapter 1 - Laws and Regulations

MT651.0103 State Laws and Regulations

(a) General

The Food, Conservation, and Energy Act of 2008 (PL 11-246) places a high emphasis on assisting producers to comply with local, state, and national regulatory requirements concerning natural resources. Of special concern is to assist landowners with the Clean Water Act requirements, particularly those related to Animal Feeding Operations (AFO) and Confined Animal Feeding Operations (CAFO). The statute includes broad parameters of assistance, including the provision of assistance to new and expanding AFO/CAFO's.

The 2008 Farm Bill allows assistance for new AFO or CAFO facilities. Montana NRCS will place its highest priority on addressing the on-site resource concerns related to an existing AFO/CAFO.

NRCS will provide the most cost-effective and least intrusive solution possible to: 1) Assist producers so they comply with the Montana Department of Environmental Quality (DEQ) requirements, or 2) Assist producers to avoid the need for regulatory requirements. In both cases the goal will be to do this on-site whenever possible.

(b) Montana Water Quality Act (75-5-101 et seq. MCA)

Section 605(1)(a) of the Act (revised 1991) states that *"It is unlawful to--cause pollution--of any state waters or to place or cause to be placed any wastes in a location where they are likely to cause pollution of any state waters; . . ."* (This requirement is independent of whether it is a "point source" or a "non-point source" situation.)

"State Waters" mean any body of water, irrigation system, or drainage system, either surface or underground. (b) The term does not apply to: (I) ponds or lagoons used solely for treating, transporting, or impounding pollutants; or (ii) irrigation waters or land application disposal waters when the waters are used up within the irrigation or land application disposal system and the waters are not returned

to any other state waters." (Definition from MONTANA WATER QUALITY ACT Title 75-5-101).

If any water passes beyond a property boundary either on the surface or underground, consider it state water. Runoff flowing in a normally dry drainage way that crosses a property boundary is "state water".

(1) Agricultural Point Source Pollution

Public Law 92-500 Federal Water Pollution Control Act Amendments of 1972, Public Law 95-217 Clean Water Act of 1977, and the Montana Water Quality Act define *"concentrated animal feeding operations"* (CAFO) as *"point sources"* of pollution and thus must obtain a MPDES permit specifying allowable discharges and a compliance plan.

While the federal definition of a concentrated animal/poultry operation depends on specific animal units and times (See EXHIBIT D, of this chapter, **40 CFR-CHAPTER I-PART 122**), the State of Montana definition also incorporates (by the Department's designation) the following process to make a CAFO determination.

(From Administrative Rules of Montana ARM-17.30.1330):

*On a case-by-case basis, the department may designate any animal feeding operation as a concentrated animal feeding operation upon determining that it is a **significant contributor** of pollution to state waters. In making this designation the department shall consider the following factors:*

- (a) the size of the animal feeding operation and the amount of wastes reaching state waters;*
- (b) the location of the animal feeding operation relative to state waters;*
- (c) the means of conveyance of animal wastes and process waste waters into state waters;*
- (d) the slope, vegetation, rainfall, and other factors affecting the likelihood or frequency of discharge of animal wastes*

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(e) and process waste waters into state waters; and other relevant factors.

(2) Point Source Compliance Rules and Regulations

If the confinement area can be described as in Part (1) above then the following rules apply:

- The runoff for up to and including a 25-year, 24-hour rainfall for the confinement area and from the surrounding area that comes in contact with the confinement area must be contained to prevent the runoff from entering state waters.

All land areas used for the collection/storage/treatment of animal wastes, agricultural waste waters, polluted runoff, bedding, and/or feeds shall be isolated to prevent any pollutant from such materials from entering state surface and ground waters.

- All land areas used for the disposal/utilization of animal wastes, agricultural waste waters, or polluted runoff, bedding, and/or feeds shall be isolated to prevent any pollutant from such materials from entering state surface and ground waters.

(3) Point Source Compliance Guidelines

Guidelines to meet these regulations are based on the fact that in Montana it is generally not practical nor cost effective to treat animal wastes to stream discharge standards or for nutrient reduction. It is more practical to store the wastes until they can be utilized in the soil.

- Agricultural wastes, wastewater and polluted wastewater must be stored in a manner that cannot reach state waters.
- Polluted runoff must be stored until the land surface can absorb the applied water in a non-polluting manner.
- To eliminate the need to spread wastes on frozen, snow covered, or saturated ground, NRCS recommends that agricultural wastes and wastewater should be stored for a minimum of 180 days. The design storage period will depend on the specific climatic

conditions and topography of the site, and the operator's waste utilization plan. Solids may be spread during winter months in some parts of the state on flat field areas, which are distant from state waters. This requires good documentation using RUSLE2 or a similar model to evaluate the potential for solids movement during runoff events. This will require approvals from the Area Engineer and Area Resource Conservationist.

(4) Agricultural Non-Point Source Pollution

Public Law 100-4 of the 1989 Amendments to the Federal Water Pollution Control Act included implementation of "Best Management Practices (BMPs)" to reduce "non-point" pollutant loading. Montana's Non-Point Source Management Plan specifies the use of BMPs to address non-point source pollution on a voluntary basis. However, if the Montana Water Quality Act is being violated, implementation ceases to be voluntary.

Non-point source pollution control attempts to minimize the chance of wastes reaching state waters. Allowing livestock to over-graze, destroy riparian vegetation, and trample stream banks does not minimize the chance of wastes (manure and sediment) from entering state waters. At a certain point, the riparian zone abuse, livestock density/duration, lack of management, etc., results in wastes "*placed or cause to be placed. . . . in a location where they are likely to cause pollution of state waters*" An operator of a non-point source operation may be violating Section 75-5-101, by collecting and placing or allowing wastes to concentrate in a place "*where they are likely to cause pollution of any state waters. . . .*"

(5) Current Montana DEQ Guidelines on an AFO

In the past, a majority of Montana AFO facilities and corrals were built or located adjacent to natural water sources. Many producers and NRCS staff had questions as to whether the AFO facility required a permit, whether or not it was a point source, or if the AFO was a

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significant contributor of pollution to state waters.

On November 12, 2003, a joint meeting was held between Montana DEQ and NRCS. The purpose of the meeting was to discuss the definition of “a significant contributor” of pollution to state waters (ARM 30-13.17.30.1330). The administrative rules state that if there are less than 300 animal units and the runoff from the Animal Feeding Operation (AFO) system is not a point source, as per the Montana Water Quality Act; the source would not be considered “a significant contributor” of pollution.

The Environmental Protection Agency (EPA), in their National Pollutant Discharge Elimination System (NPDES), Federal Register dated February 12, 2003, lists three basic sized categories for CAFO’s as outlined in Table 4.1. There are large, medium, and small CAFO’s. The large and medium CAFO’s must meet the size category along with meeting one or two of the methods of discharge criteria. The method of discharge for large or medium CAFO’s is: (1) Pollutants are discharged into waters of the United States through a manmade ditch, flushing system, or other similar manmade device; or (2) Pollutants are discharged directly into waters of the United States that originate outside the facility and pass over, across, or through the facility, or otherwise come in direct contact with the confined animals. The small CAFO is not a CAFO by regulatory definition, but may be designated as a CAFO on a case-by-case basis. See Table 4.1 – Summary of CAFO Size Thresholds for All Sectors on Page MT1-6(5).

An AFO means a lot or facility (other than an aquatic animal production facility) where the following conditions are met: (1) 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 (2) crops, vegetation, forage growth or post-harvest residues are not sustained in the normal growing season over any portion of the lot or facility.

If an operator has a small AFO that is not a CAFO as defined above, the operator can avoid

having their operation designated as a CAFO by:

- (1) Eliminating any condition that meets the discharge criteria (as defined above); and
- (2) Reducing or eliminating their discharges or pollutants to surface waters to minimize the chance that the permitting authority will find that their operation is a “significant contributor of pollutants to waters of the United States”.

MCA 75-5-802 adopted the EPA policies, procedures, and definitions published in the CFR, Title 40, Parts 122, 123, and 412. The threshold number of animals detailed in 40 CFR 122.23(b)(4).

1. One to 299 head of beef cattle or other animal equivalents is considered as a small AFO if the criteria listed below is met, and;
2. 300 to 999 head or animal equivalents is to be treated as a medium-sized CAFO; as defined below, and;
3. Over 1,000 head or animal equivalents are to be treated as a large CAFO.

Small AFO Operations

The following will be NRCS policy for assisting with small AFO facilities: NRCS will treat animal facilities that have an operational capacity of less than 300 head of beef cattle (or animal equivalent) as a non-point source which DOES NOT need a permit-so long as:

- (a) NRCS works with the owners/operators of these facilities to fence off access to streams, installs a Vegetated Treatment Area (Practice Standard 635), and/or other necessary practices between the AFO and the stream, and provides livestock with a replacement source of water. NRCS will also assist in providing animals with herbaceous or fabricated shelters from the wind, if necessary.
- (b) NRCS designs, drawings and construction shall ensure that any runoff from the facility is infrequent, and, if runoff does occur, it is overland or sheet flow that does not come from a pipe, gully, ditch, or other manmade or natural structure that could be considered a

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point source as defined above. In cases where there is a point source, NRCS will work with the operator to remove the point source. (This may require land leveling, and/or earthfill operations.) In all cases, the owner agrees to maintain the practice(s) to ensure the installed practice(s) function as designed with the use of the NRCS Operation and Maintenance Plan.

(c) For producers with less than 300 head of beef cattle (or animal equivalent) who remove their cattle from having direct access to state waters and who meet approved NRCS treatment plans and do not discharge wastes through a natural or manmade ditch, gully, or flushing system, the state will consider the producer as having fulfilled the requirement of “all reasonable land, soil, and water conservation practices” under state law and the producer will not have to obtain a permit under the Clean Water Act so long as the producer meets and maintains the NRCS chosen conservation standards.

(d) If a facility is on Tribal Lands, NRCS staff shall meet with tribal environmental offices to determine how each tribe wishes to address the treatment. The Department of Environmental Quality and the Environmental Protection Agency in Helena, Montana shall also be contacted because of the complex land ownership within Tribal boundaries. The agricultural waste facility has to meet Tribal, and/or EPA/DEQ requirements.

(e) Other considerations: 1) Clean water should be separated from polluted water to reduce the volume of water that comes in contact with the agricultural waste, 2) Constructed vegetative filters, fencing and adequate earthwork may be required to reduce the contaminants in the runoff so the contaminants are not a “significant contributor” of pollution to state waters as stated in the law, 3) Sheet flows from the system are required for uniform spreading of the contaminated liquids. If the system has gullies or undulating land, this will most likely require earthwork to make sure that any flows leaving the system are sheet flows, 4) All practices installed will require regular maintenance and management so the

runoff from the system does not convert from a non-point to a point source.

Medium CAFO Operations

A medium CAFO operation of between 300-999 beef cattle or animal equivalent **may** require a permit if it is determined by DEQ to be a significant contributor of pollution to state waters as defined in **Section (b)(1) Agricultural Point Source Pollution located on Page MT1-6(1)**. In addition, if NRCS provides technical or financial assistance, and DEQ determines that a permit is needed, the facility shall be designed as defined in **Section (b)(2) Point Source Compliance Rules and Regulations and Section (b)(3) Point Source Compliance Guidelines as located on Page MT1-6(2)**.

NOTE: If a medium-sized agricultural waste facility is constructed and there is discharge that is not overland laminar sheet flow to state waters, the facility will require a permit.

Large CAFO Operations

All facilities of 1,000 head of beef cattle or animal equivalent will require a permit from DEQ. If NRCS provides technical or financial assistance, the facility shall be designed as defined in **Section (b)(2) Point Source Compliance Rules and Regulations and Section (b)(3) Point Source Compliance Guidelines as located on Page MT1-6(2)**.

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TABLE 4.1. – Summary of CAFO Size Thresholds for All Sectors

Sector	Large	Medium ¹	Small ²
Cattle or cow/calf pairs	1,000 or more	300-999	Less than 300
Mature dairy cattle	700 or more	200-699	Less than 200
Veal calves	1,000 or more	300-999	Less than 300
Swine (weighing > 55 lbs.)	2,500 or more	750-2,499	Less than 750
Swine (weighing < 55 lbs.)	10,000 or more	3,000-9,999	Less than 3,000
Horses	500 or more	150-499	Less than 150
Sheep or lambs	10,000 or more	3,000-9,999	Less than 3,000
Turkeys	55,000 or more	16,500-54,999	Less than 16,500
Laying Hens or broilers (liquid manure handling system)	30,000 or more	9,000-29,999	Less than 9,000
¹ Must also meet one of two “method of discharge” criteria to be defined as a CAFO or may be designated. ² Never a CAFO by regulatory definition, but may be designated as a CAFO on a case-by-case basis.			

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Figure MT1-1 Agricultural Waste System Permitting Flow Diagram

(When the Ag. Waste System DOES NOT MEET the definition of a Small AFO Operation as defined on Pages MT1-6(3) and MT1-6(4), follow the flow diagram below.)

