

IOWA STATE UNIVERSITY

Extension and Outreach

Medium CAFO Summary

What is an AFO?

An **AFO** (Animal Feeding Operation) is an agricultural operation where animals are kept and raised in confined situations (roofed or open) and confined for at least 45 days in a 12-month period, and there is no grass or other vegetation in the confinement area during the normal growing season. This would usually not include pastures, but would include feedlots, cow yards, and concentrated feeding areas.

What is a CAFO?

A **CAFO** (Concentrated Animal Feeding Operation) is an AFO that meets one of the regulatory definitions as a large, medium or small CAFO.

Large CAFOs meet the CAFO definition purely by one-time maximum animal capacity (1000+ beef or immature dairy, 700+ mature dairy, 2500+ swine).

Medium CAFOs meet the CAFO definition by animal capacity (300-999 beef/immature dairy, 200-699 mature dairy, 750-2499 swine) and by specific pollutant discharge conditions.

Small CAFOs meet the CAFO definition without regard to capacity by reason of significant pollutant discharge and are designated on a case-by-case basis.

How do I count animal capacity?

Iowa producers must count by two methods to comply with both federal law and Iowa law.

1. Count all animals at the site that are the same animal type, regardless of housing method (all beef and immature dairy, all mature dairy, all swine, etc.). Consider the number by each animal type to determine size category. Once the CAFO threshold is met for any one animal type, the site requires a permit and manure controls if it discharges manure or process wastewater to a water of the U.S.
2. Count all animals at the site that are housed in the same manner (all species of open lot animals, or all species of confinement animals). Use the larger of either housing method to determine size category. Once the CAFO threshold is met for either housing method, the site requires a permit and manure controls if it discharges manure or process wastewater to a water of the U.S.

What discharge conditions define a medium CAFO?

Medium CAFOs are medium sized AFOs where manure or process wastewater is discharged into waters of the U.S. through a man-made ditch, flushing system or other similar man made device, or manure or process wastewater is discharged directly into waters of the U.S. which originate outside of and pass over, across or through the facility or otherwise come into direct contact with animals in the operation.

A discharge which reaches a water of the U.S. and passes through a man-made ditch or similar man-made device at any point along the flow path is a qualifying discharge.

What is a water of the U.S.?

The definition in law is lengthy, but all lakes, streams and adjacent wetlands would be waters of the U.S. Even intermittent streams that don't flow year-round might be waters of the U.S. if they have

identifiable bed and banks. Grassed waterways in uplands with no eroded channel in the bottom are probably not waters of the U.S. Groundwater is not included in waters of the U.S.

What is a man-made ditch or similar man-made device?

In documents of clarification, EPA has stated the following: “Man-made devices include pipes, ditches, and channels. A man-made channel or ditch that was not created specifically to carry animal wastes but nonetheless does so during storm events is considered a man-made conveyance. These conveyances assist or facilitate the wastes in reaching waters of the U.S. In other words, they cause the situation at the animal feeding operation to be worse than if the ditch or flushing system did not exist.” EPA inspectors appear to consider road ditches, road culverts and tubes, tile lines, transfer pipes, and waterways that have eroded channels in the bottom to be man-made devices.

How do I determine where waters of the U.S. start or where man-made devices exist?

Some cases may be clear enough to determine on your own. If you are unsure, field inspectors from EPA or Iowa DNR can assist you in making a determination. In the end, EPA and DNR staff have the authority and responsibility to make the final call.

What are the requirements for medium CAFOs?

The federal Clean Water Act requires that CAFOs (large, medium or small) be permitted if they discharge to waters of the U.S. Medium CAFOs that discharge to waters of the U.S. directly or through man-made ditches or devices must install required controls to stop discharges under normal circumstances and obtain a National Pollutant Discharge Elimination System (NPDES) permit to allow discharges in circumstances beyond the required control design.

How can I avoid being a medium CAFO?

If you are currently at risk of being a medium CAFO but would like to avoid that designation, you have three options:

1. Reduce your animal capacity to less than the medium threshold.
2. Eliminate the man-made ditch or similar device.
3. Eliminate the discharges to waters of the U.S. directly or through the man-made device.

Keep in mind that some Iowa water quality regulations apply even to small AFOs and to AFOs that discharge without using man-made devices. Take care to comply with both the Iowa rules and the federal Clean Water Act.

How can I get technical assistance?

Iowa DNR field inspectors can help with determinations of waters of the U.S. and medium CAFO status. Engineers from private consulting firms, the Natural Resources Conservation Service, and ISU Extension can assist with determining CAFO status, evaluating sites and designing controls.

Is there financial assistance?

Construction of some controls may qualify for Environmental Quality Assistance Program (EQIP) assistance through NRCS, or for low-interest loans through the State Revolving Fund (SRF) of the Iowa Department of Agriculture and Land Stewardship. Specific design standards apply to projects seeking EQIP or SRF assistance.

These comments are intended as a brief summary and do not contain all provisions of NPDES permit rules and requirements. Talk to a qualified consultant or DNR staff member for full details.

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