



Medium CAFO Designations for Animal Feeding Operations (AFOs)

In December 2002, the United States Environmental Protection Agency (USEPA) revised the Clean Water Act regulation for Concentrated Animal Feeding Operations (CAFOs). The new Federal Rule changes the animal thresholds over which an Animal Feeding Operation (AFO) is defined as a Medium CAFO, thereby changing which operations need discharge authorization by the CAFO General SPDES Permit (GP-04-02). This document provides guidance for determining if an AFO would be considered a Medium CAFO operation.

In order to be eligible for permit coverage as a Medium CAFO, an operation must meet the following three criteria: (1) it must be an AFO, (2) it must stable or confine enough animals and (3) it must have a discharge of manure or process wastewater into waters of the State.

Step 1 - determining if an AFO is a livestock or poultry operation that stables or confines animals within any of the following ranges:

- 200-699 Mature Dairy Cows, whether milked or dry
- 300-999 Veal Calves
- 300-999 Cattle, other than mature dairy cows or veal calves (Cattle includes but is not limited to heifers, steers, bulls and cow/calf pairs)
- 750-2,499 Swine, each weighing 55 pounds or more
- 3,000-9,999 Swine each weighing less than 55 pounds
- 150-499 Horses
- 3,000-9,999 Sheep or Lambs
- 16,500-54,999 Turkeys
- 9,000-29,999 Laying Hens or Broilers, if the AFO uses a liquid manure handling system
- 37,500-124,999 Chickens (other than laying hens), if the AFO uses other than a liquid manure handling system
- 25,000-81,999 Laying Hens, if the AFO uses other than liquid manure handling systems
- 10,000-29,999 Ducks, if the AFO uses other than a liquid manure handling system
- 1,500-4,999 Ducks, if the AFO uses a liquid manure handling system

Step 2 - determining if a livestock or poultry operation is an “Animal Feeding Operation” - An Animal Feeding Operation is:

“ A lot or facility (other than an aquatic animal production facility) where animals have been, are, or will be stabled or confined and fed or maintained for a total of 45 days or more in any 12-month period, and the animal confinement areas do not sustain crops, vegetation, forage growth, or post-harvest residues in the normal growing season.”

Step 3 - determining if there is a discharge of manure or process wastewater into waters of the State through a man-made ditch, flushing system, or other similar man-made-device, or directly into waters of the State that originate outside of the facility and pass over, across, or through the facility or otherwise come into direct contact with the confined animals.

In this determination the discharge must include manure or process wastewater. If such a discharge occurs under any climatic condition (not limited by storm intensity) a permit is required. Any climatic condition means that a discharge cannot occur ever, even during major precipitation events such as a 100 year or greater frequency storm (generally 5 to 7 inches of rain over 24 hours depending on location), major snow melt events, or chronic wet weather conditions.

Medium CAFOs that do not discharge under any climatic condition are not CAFOs and do not require a SPDES permit. Medium CAFOs that address discharges such that there is no discharge under any climatic condition are no longer CAFOs and may terminate CAFO permit coverage.

Examples of cases where AFOs would not be considered to have a discharge have the production area and manure storage under roof or AFOs on a flat well drained site a considerable distance from surface waters, including man-made ditches and waterways. Review the following definitions and examples to help determine if your facility has no discharge.

If you think no discharge is a possibility after reviewing this material, NYSDEC strongly advises you to seek assistance from a Resource Professional in making a final determination. If you do discharge, they can help in determining what it will take to eliminate the discharge and how to maintain that condition. Staff from County Soil & Water Conservation Districts, the Natural Resources Conservation Service, Cornell Cooperative Extension, or private Certified Comprehensive Nutrient Management Planners can be asked to provide an on- site assessment (contact information is attached). A Resource Professional can utilize the State's Agricultural Environmental Management (AEM) Program Tier 2 Worksheets to help in assessing your risk of discharging process wastewater.

Discharge defined:

A **discharge** is the flowing out or release of manure or **process wastewater** from your facility's **production area** into waters of the State through a **man-made** ditch, flushing system, or other similar man-made device, or directly into waters of the State that originate outside of the production area and pass over, across or through the facility or otherwise come into direct contact with the confined animals. If such a discharge occurs under **any climatic condition** (not limited by storm size or intensity), a permit is required.

Process wastewater is:

- Spillage or overflow from animal or poultry watering systems; washing, cleaning, or flushing of pens, barns, or manure pits.
- Direct contact swimming, washing, or spray cooling of animals.
- Leachate from silage and feed storage areas.
- Wastewater generated in the production of intermediate or final products such as eggs and milk.
- Precipitation which comes into contact with any area where organic materials are stored, fed or wasted such as silos, bunk silos, organic bedding storage, grain storage, commodity buildings, feed bunks, barnyards, and manure or wastewater storage or treatment facilities.
- Runoff from fields where manure has not been applied in accordance with a nutrient management plan meeting USDA-Natural Resources Conservation Service (NRCS), Conservation Practice Standard NY-590 Nutrient Management.

Process wastewater is not:

- Precipitation that comes into contact with pastures; crop fields that do not receive manure; driveways; roof areas; or laneways associated with pastures where animals do not congregate. It is important to understand a pasture is a unit of land on which exists a suitable amount, type, and distribution of vegetation; is managed to complement the nutritional requirements of the resident livestock; and maintains adequate vegetative cover to promote water infiltration and filtration of runoff.
- Certain conservation practices that meet USDA-NRCS Standards can be utilized to mitigate or treat process wastewater. When such practices are employed and properly operated and maintained, any resulting runoff is no longer considered process wastewater. The two most common instances where best management practices (BMPs) can be employed to address process wastewater are:

The runoff from crop fields where manure is applied according to **USDA-Natural Resources Conservation Service, Conservation Practice Standard NY-590 Nutrient Management**. (See discussion of the practice standard on page 4.)

Runoff from the production area that enters a properly designed, installed, operated and maintained vegetated filter area meeting **USDA-Natural Resources Conservation Practice Standard NY-393A Filter Strip-Area**. It is important to note that vegetated filter areas must be properly operated and maintained (e.g., by removing accumulated sediment, re-grading every few years to maintain proper water flow, and mowing the grass periodically to control weeds and improve vigor) so that the treated effluent is not considered process wastewater. (See discussion of the practice standard on pages 4-5.)

Production Area means that part of an AFO that includes the animal confinement area, the manure storage area, the raw materials storage area, and the waste containment areas.

- The animal confinement area includes but is not limited to open lots, housed lots, feedlots, confinement houses, stall barns, free stall barns, milk rooms, milking centers, cowyards, barnyards, medication pens, walkers, animal walkways associated with barns or barnyards, and stables.
- The manure storage area includes but is not limited to lagoons, runoff ponds, storage sheds, stockpiles, under house or pit storages, liquid impoundments, static piles, and composting piles. If an AFO stores manure in the field (i.e., manure or litter piled for more than several days before land application occurs), the field storage is considered to be a production area. Note that manure or litter stored uncovered for more than two weeks is not considered to be short-term or temporary storage, and is included in the definition of production area.
- The raw materials storage area includes but is not limited to feed silos, silage bunkers, and organic bedding materials.
- The waste containment area includes but is not limited to settling basins, and areas within berms and diversions that separate uncontaminated stormwater.
- The production area also includes any egg washing or egg processing facility, and any area used in the storage, handling, treatment, or disposal of mortalities.

Man-made means if the means of conveyance of the runoff was developed through human action or is maintained through human action, even if natural materials were used to form the conveyance. A man-made channel or ditch that was not created to carry process wastewater but nonetheless does so during storm events is considered a man-made conveyance. A road ditch may commonly provide such a conveyance. Examples include but are not limited to:

- Silage leachate, barnyard runoff, or milk center washwater that flows untreated over land to a waterway, drainage ditch, road ditch, or stream.
- Manure consistently slopped over a barnyard curb that lands in a waterway or other area where runoff during a storm or snowmelt will flow to a ditch or waterbody.
- Runoff from a cropfield to a road ditch, drainage ditch, or stream where manure was not applied according to **USDA-Natural Resources Conservation Practice Standard NY-590 Nutrient Management**.

USDA-Natural Resources Conservation Practice Standard NY-590 Nutrient Management is a federal standard that must be met in applying manure to the land in order for the potential runoff to not be considered process wastewater. This is the same standard that permitted Concentrated Animal Feeding Operations (CAFOs) must meet for land application of manure. The complete standard is available on line at:

<http://efotg.nrcs.usda.gov/treemenuFS.aspx?Fips=36067&MenuName=menuNY>zip>

Key components of the standard include:

- The amount, placement, and timing of manure applications will be consistent with the standard and the current Cornell Guide for Integrated Field Crop Management.
- The soil in each crop field will be analyzed for nutrient content at least every 3 years.
- The nutrient content of each manure source will be analyzed annually.
- Utilization of the NY Phosphorus Index (PI) runoff risk reduction tool on each crop field and management of P application consistent with the PI rating.
- Utilization of the NY Nitrogen Leaching Index (N-Leach Index) risk assessment tool on each crop field and management of N application consistent with the index rating.
- Soil erosion, runoff, and water management controls shall be installed, as needed, on fields that receive manure.
- Appropriate setbacks from waterbodies, wells, springs, and sinkholes must be maintained when applying manure.
- Manure application equipment must be regularly calibrated and maintained. In addition, all manure application equipment records must be maintained onsite.

Note – NRCS Conservation Practice Standards and Cornell Guidelines are developed to reduce the risk of water quality contravention, but do not eliminate the risk from agricultural activities. A water quality violation could occur and you may be fined even while following NRCS Conservation Practice Standards. The importance of proper and timely operation and maintenance of this practice cannot be overstated in avoiding a potential contravention of water quality standards.

USDA-Natural Resources Conservation Service Conservation Practice Standard NY-393A Filter Strip-Area is a federal standard that when properly applied will remove sediment, organic matter, nutrients, and other pollutants from process wastewater. Runoff that flows through a properly designed and maintained grassed filter area will not be considered process wastewater. The complete standard is available on line at:

<http://efotg.nrcs.usda.gov/treemenuFS.aspx?Fips=36067&MenuName=menuNY.zip>

Key components of the standard include:

- Installed outside the 25-year floodplain or protected from flood damage.
- Requires a level cross-section that insures sheet flow.
- Be placed so the lower edge of the area is at least 25 feet from a waterbody and 100 feet from a well.
- Placed where dense vegetation exists or can be established.
- Finished grade is not less than 2 % and not more than 12%.
- Soils must have a natural permeability between moderately slow and moderately rapid or the site/soil is modified to achieve acceptable permeability.
- The soil surface to bedrock or the seasonal high water table must be at least two feet in depth.
- Any solids in runoff must be removed by a settling basin, low velocity channel, or other suitable device.
- Dimensions of the area and flow length depend on the volume and origin of runoff.

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Analysis and Result

If correct review of the information above and your on-site consultation with a Resource Professional leads you to determine you do not discharge, then you may reasonably conclude you are not a CAFO and permit coverage is not required. Before making a final determination to not apply for permit coverage, or withdraw from coverage, the following should be considered:

- The benefits of permit coverage set forth in Fact Sheet “New York State CAFO Permit Program Benefits”.

- Your “no discharge” status will need to be maintained. This means:

Continuously following a nutrient management plan that meets NRCS Conservation Practice Standard NY-590 on all fields where manure and process wastewater is applied.

Operating and maintaining all components of your production area to assure a discharge will not occur.

You may need the assistance of a Certified Comprehensive Nutrient Management (CNMP) Planner or become trained as a planner yourself to help you manage and maintain your “no discharge” status.

- NYSDEC may review your no discharge determination periodically.

Operations that do not need permit coverage or determine they can withdraw from permit coverage are strongly encouraged to participate in the voluntary Agricultural Environmental Management (AEM) Program through their County Soil & Water Conservation District.