University of Tennessee, Knoxville
Trace: Tennessee Research and Creative Exchange

Animals/Livestock | UT Extension Publications

4-20-2010

W080-Permit Requirements for Tennessee's Dairy Industry

The University of Tennessee Agricultural Extension Service

Follow this and additional works at: http://trace.tennessee.edu/utk_agexani

Part of the Animal Sciences Commons, and the Business Commons

Recommended Citation
"W080-Permit Requirements for Tennessee's Dairy Industry," The University of Tennessee Agricultural Extension Service, , http://trace.tennessee.edu/utk_agexani/49

The publications in this collection represent the historical publishing record of the UT Agricultural Experiment Station and do not necessarily reflect current scientific knowledge or recommendations. Current information about UT Ag Research can be found at the UT Ag Research website.
This CAFO Factsheet is brought to you for free and open access by the UT Extension Publications at Trace: Tennessee Research and Creative Exchange. It has been accepted for inclusion in Animals/Livestock by an authorized administrator of Trace: Tennessee Research and Creative Exchange. For more information, please contact trace@utk.edu.

Livestock Waste Management and Conservation

Permit Requirements for Tennessee's Dairy Industry

Tennessee CAFO Factsheet #1

Kristy M. Hill, Extension Dairy Specialist
Animal Science Department

Congress passed the Clean Water Act in 1972 to "restore and maintain the chemical, physical and biological integrity of the Nation's waters." The Clean Water Act established a comprehensive program for protecting and restoring our nation's waters. Among its core provisions is prohibiting the discharge of pollutants from a point source to waters of the United States except as authorized by an NPDES (National Pollutant Discharge Elimination System) permit.

EPA established effluent guidelines for feedlots in 1974 based on the best available technology that was economically achievable for the industry. Concentrated Animal Feeding Operation (CAFO) regulations, issued in 1976, determined which Animal Feeding Operations (AFOs) were defined as CAFOs under the Clean Water Act and therefore subject to regulations. However, many changes have occurred in the U.S. animal production industry since the development of the original regulations. The continued trend toward fewer but larger operations, coupled with greater emphasis on more intensive production methods and specialization, are concentrating more manure nutrients and other animal waste constituents in some geographic areas.

The new CAFO rules, published February 12, 2003 in the *Federal Register*, were adopted within the authority of the 1972 Clean Water Act to address changes in the animal production industries. EPA's revisions make the new regulations more effective in protecting or restoring water quality. They are more inclusive of certain sectors of the CAFO industries; removed several permitting exemptions; reflect a greater focus on land application; and emphasize accountability, inspections and recordkeeping. *(Adapted from the Livestock and Poultry Environmental Stewardship Factsheet Series.)*

The Tennessee regulations and permits come under the authority of the Tennessee Department of Environment and Conservation (TDEC), with review assistance from the Tennessee Department of Agriculture.

What Is an AFO?

An Animal Feeding Operation (AFO) is a livestock operation that maintains animals for any 45 days or more (not necessarily consecutive days) over a 12-month period in a place of confinement that does not contain vegetation during the normal growing season.

What Is a CAFO?

A Concentrated Animal Feeding Operation (CAFO) is an Animal Feeding Operation that meets certain threshold numbers and certain on-farm situations. They are divided into Large and Medium

categories. Large CAFOs (Class I) are determined by the number of animals only. The number of animals **and** conditions that exist at the farm level determine Medium CAFOs (Class II).

Are Grazing Dairies AFOs and CAFOs?

Grazing dairy operations are considered to be AFOs because animals are confined during milking, and manure and wastewater are collected from the milking parlor. Therefore, grazing dairies can also be included in the CAFO category. Grazing dairies with 700 or more mature dairy cows (Large CAFOs) must apply for an Individual NPDES Permit. Grazing dairies that meet the animal requirements and one of the specified conditions for a Medium CAFO must also seek a General NPDES Permit.

Who Needs a NPDES Permit?

Any dairy operation with 700 or more mature dairy cows (Large CAFO – Class I) must apply for an ***Individual*** NPDES Permit. Please contact the TDEC for permit requirements. Applications for Class I CAFOs can be found on the Animal Science Department's Livestock Waste Management and Conservation Web site, http://animalscience.ag.utk.edu/WasteManagement/WasteManagement.htm

Dairy operations with 200 to 699 mature dairy cows ***and*** one of the following conditions are considered to be Medium CAFOs (Class II) and must apply for a ***General*** NPDES permit.

1. Pollutants are discharged to waters of the state (through direct discharge, a pipe, a ditch or any other discernible conveyance)
2. Confined animals have direct contact with waters of the state
3. Location of operation is in a watershed that has been identified by TDEC as being impaired for *nutrients* or *pathogens*
4. Operation began on or after May 1, 1999
5. Operation expanded from less than 199 mature dairy cows to 200 – 699 mature dairy cows on or after July 21, 2004, or
6. Operation had previous herd size between 200 – 699, and was not previously regulated and expanded herd size within 200 – 699 mature dairy cows after April 14, 2003

The General NPDES Permit expires on August 5, 2009.

What Is a "Mature Dairy Cow"?

The EPA definition of a "mature dairy cow" is one that has previously given birth. However, after clarifying the definition with the TDEC, more than lactating animals may be used for counting purposes. On dairy operations, any animal that is *confined and contributes to the nutrient management plan* (potentially including confined dry cows or confined heifers) will be used for counting purposes. Animals that are pastured and not confined for any portion of the day should not be counted.

How Do I Determine Watershed Impairment?

Every two years, the TDEC determines which watersheds in the state are impaired and the causes of water quality deterioration. Watersheds can be impaired with siltation, organic enrichment, nutrients, pathogens or other impairments. The source of those impairments could be from agricultural practices, industry, construction, property owners and other sources. Watersheds in Tennessee that are impaired are listed on the 303(d) List.

If an AFO is located on or near a waterbody that is impaired for nutrients or pathogens, regardless of the source of pollution, it must be permitted. To determine if your operation is on or near an impaired waterbody, determine the waterbody nearest you (or your watershed) and check against the TDEC's 303(d) List. This list is available on the Livestock Waste Management and Conservation Web site or through your regional Tennessee Environmental Assistance Centers. If your watershed is impaired for *nutrients* or *pathogens*, then you must inquire with one of Tennessee Environmental Assistance Centers or TDEC of the location of the impairment in relation to your operation. In some cases, your operation may be below the area of impairment, and a permit will not be necessary. If your operation is located within the impaired segment, you will be permitted. If your operation is located above the impaired segment, TDEC will make a best professional judgment to determine if your operation is contributing to or has the potential to contribute to the impaired segment.

What Is "Expansion"?

Tennessee's CAFO rules state that if an operation expands, it must seek coverage under a general permit. There are two situations in which an expanding operation must seek coverage.

1) If prior to July 31, 2004 your confined animal numbers were below 200, and you expanded to confined animal numbers above 200 after July 31, 2004, you must seek permit coverage.

   For example, if in January 2004 you had 150 mature dairy cows and you expanded your herd to 300 mature dairy cows in August 2004, you must seek permit coverage.

2) If previously you had herd numbers between 200 and 699 and you were not permitted, and you expanded your herd (still within the 200 – 699 range) after April 14, 2003, you must seek permit coverage.

   An example would be this: Your herd numbers have been averaging 300 cows since January 1996. You have never discharged waste into a Tennessee stream, your herd does not come into direct contact with any Tennessee stream and you are not located on an impaired watershed. So, you would not be considered a CAFO according to old or new Tennessee regulations. However, you expanded your herd to 400 cows in June 2003 (or later). You must now seek coverage under a Class II General Permit.

I Am a Small Dairy (Less Than 200 Confined Animals). Do I Need a Permit?

Any size dairy can be designated as a CAFO and required to seek permit coverage. Factors to be considered in this determination include the AFOs size, the amount of waste reaching waters of the state, the location of the AFO and the means of waste conveyance to waters of the state.

To this date, no small dairies have been permitted. In most cases thus far, the TDEC and TDA have worked with small operations to correct pollution concerns. However, smaller dairies may choose to obtain a General NPDES Permit for the protection it will provide in the event of a discharge.

Requirements of CAFOs

To see the complete requirements (manure storage, application setbacks, nutrient management plans, transferring manure, recordkeeping, etc.) for Class II CAFOs, please refer to Tennessee CAFO Factsheets found on the Livestock Waste Management and Conservation Web site (http://animalscience.ag.utk.edu/WasteManagement/WasteManagement.htm)

Notice of Intent (NOI)

Producers who meet the requirements of a Medium CAFO must first apply with a Notice of Intent form submitted to the TDA on the following schedule:

SITUATION	NOI DUE
Existing Class II CAFO, previously permitted under a general permit	Immediately
Existing Class I CAFO, previously permitted under an individual permit	180 days before individual permit expires
Existing operation, newly regulated as of the new rules	February 13, 2006
Existing operation in which changes to the operation or stream quality (increase in size to CAFO status or watershed becomes impaired for nutrients or pathogens) after April 14, 2003 require the operation to move into CAFO status	Within 90 days of becoming a CAFO
New operation, meeting Class I or Class II requirements	180 days before operation begins
A permitted Class II CAFO site changes ownership; new operator must submit a NOI	At least five days prior to the change in ownership

NOI forms must be accompanied by either a Comprehensive Nutrient Management Plan or a nutrient management plan that meets permit requirements, a closure/rehabilitation plan (see Tennessee CAFO Factsheet #16 for more information on closure/rehabilitation plans), and a copy of a USGS topographic map or county map identifying the operation location, property boundaries and any surface waters within a one-mile radius beyond the operation property.

NOI forms may be obtained from any of Tennessee's Environmental Assistance Centers, the Livestock Waste Management and Conservation Web site, or by calling 1-888-891-8332. Completed NOI forms should be submitted to:

CAFO Notice of Intent
Water Resources Program/CAFO
Tennessee Department of Agriculture
Ellington Agricultural Center
440 Hogan Road
Nashville, TN 37220

The TDA will review the NOI and all attachments. Upon approval, the TDA will forward the NOI to the TDEC. The TDEC will send a letter of coverage (Notice of Coverage) to the operator of the CAFO upon receipt of the NOI. The issuance of a Notice of Coverage typically takes three weeks or less after the TDA receives it.

For more information on Tennessee's CAFO rules, please see the Tennessee CAFO factsheet series on the Animal Science Department's Livestock Waste Management and Conservation Web site at http://animalscience.ag.utk.edu/WasteManagement/WasteManagement.htm

Programs in agriculture and natural resources, 4-H youth development, family and consumer sciences, and resource development.
University of Tennessee Institute of Agriculture, U.S. Department of Agriculture and county governments cooperating.
UT Extension provides equal opportunities in programs and employment.