

**Notice of Determination
General NPDES Permit to Operate a Class II
Concentrated Animal Feeding Operation (CAFO)**

Permit No. TNA000000

I. Background

Tennessee's Water Quality Control Act requires that operations that have the potential to impact the waters of the State of Tennessee be permitted by the Department of Environment and Conservation (TDEC). Concentrated animal feeding operations (CAFO) are deemed point source discharges and thus have the potential to impact to waters of the state.

Because the activities and nature of almost all CAFOs are similar, with respect to impact on the water environment, and the needed controls to protect waters of the state are similar, it is the opinion of the TDEC that this category of sources would be controlled more appropriately under a general permit than under individual permits.

Applicability of this general permit is for new and existing medium CAFOs as defined in Chapter 1200-4-5-.14 of the Rules of Tennessee Department of Environment and Conservation. Medium (Class II) CAFOs are those which confine animals in the numbers found in column 2 of Table 1200-4-5.14.1 and meet one of the following criteria: (1) pollutants are discharged through a discrete, discernable conveyance to waters of the state or (2) pollutants are discharged to waters of the state which come into direct contact with confined animals or (3) the feeding operation is located on a water body that has been identified by TDEC as being impaired for nutrients or pathogens.

This general permit was placed on public notice March 9, 2004. Subsequently, the department held a series of public hearings across the state between April 12, 2004 and April 20, 2004. During the comment period that closed on April 30, 2004, the department received a number of oral and written comments, which are summarized below in Section II.

II. Comments and Responses to Comments

Comment

Permitting and monitoring of CAFOs are expenses to the state and the permittee should pay an annual maintenance fee of \$100.

Response

According to Rules of the Tennessee Department of Environment and Conservation (1200-4-11-.02(b) 11), the annual maintenance fee for facilities covered under general permits is \$250 except for concentrated animal feeding operations.

Comment

There were several comments about public participation. One commenter wanted the public comment period for general permits to be 30 days. Another commenter asked the public be given the opportunity to comment before issuing coverage for a general permit. The same commenter wanted public hearings held, if there was sufficient local interest. Another commenter suggested that TDEC withhold issuance of coverage if a public hearing is requested. One commenter suggested that interested parties and neighboring landowners should receive copies of permit. One commenter complained that public hearing was not held in Memphis, and the scheduling at other venues in the late afternoon was not conducive to public participation. Copies of all relevant documents should be available to the public at the hearing location

Response

The comment period for the draft general permit is, in fact, 30 days. However, Rule 1200-4-5 does not give any provision for comment periods associated with the issuance of coverage under a general permit. However, if the department determines the submitted notice of Intent (NOI) to be incomplete, or denies an applicant coverage under this general permit, the department shall notify the applicant of this determination.

Notices of intent as well as the general permit are available for public review at the Division of Water Pollution Control (the division) Office in Nashville.

The department does provide copies of draft general permits and the applicable rationales at the public hearings at the local Environmental Assistance Centers (EACs) and at the Nashville Central Office. Copies of these documents, as well as any NOIs submitted to the division, may also be obtained by mail and, or by e-mail, upon request.

Comment

There were a number of comments about the permitting process. These comments included: TDEC should not issue a Notice of Coverage (NOC) for a CAFO in any county that has resolved to prohibit such operation. No permit should be issued to an operation in watershed that is either impaired, or outstanding resource, or in danger of meeting the “fishable/swimmable” standard. A NOC should be not issued until nutrient management plan and waste disposal plan are approved. The Notice of Intent should include soil testing and geographic determination. Withhold the NOC until all application deficiencies are addressed. All Class I and II CAFOs must have individual permits. Extend the renewal time from 30 to 180 days. The Tennessee Department of Agriculture should not be responsible for protecting the waters of the state. TDEC should not provide general permit coverage to any operation that has had a water quality violation in the last 5 years or operations under contract with agribusiness “integrator”.

Response

There is nothing in either the Tennessee Code Annotated or the Rules of Department of Environment and Conservation that allow the division to withhold issuing a CAFO coverage because of local or county prohibitions against CAFOs or because a CAFO is associated with an “integrator.” Instances of non-compliance are subject to enforcement actions that can include revocation of permit coverage. However, previous instances of non-compliance from an unrelated activity associated with the applicant are not grounds for permit denial.

Tennessee Department of Agriculture (TDA) has the expertise to review nutrient management plans as well as any waste disposal plans. After TDA has approved these plans, the NOI is forwarded to the division for processing. Deficient NOIs must be returned for completion, because only a complete NOI can be processed.

The Environmental Protection Agency (EPA) has established threshold levels of animals to help define large and medium CAFOs. TDEC adopted these numbers in 1200-4-5.(14). In Tennessee, large (Class I) CAFOs are permitted individually, while medium (Class II) CAFOs receive coverage under a general permit. The 30-day time frame for coverage consistent with other general permits and coverage is appropriate for the level of review associated with making these types of permit decisions.

Comment

A commenter suggested that CAFOs are not a category of sources that can be regulated by a general permit.

Response

CAFOs are defined and regulated by both federal National Pollutant Discharge Elimination System (NPDES) and state regulations. Refer to 40 CFR 122 and Rules of the Tennessee Department of Environment and Conservation 1200-4-5. These regulations do not preclude the use of a general NPDES permit coverage for CAFO operations.

TDEC has determined that many CAFO operations are similar and require essentially the same permit conditions. Further, more site-specific conditions are provided through the nutrient management plans that by reference become an enforceable part of the permit. For these reasons, use of a general permit for medium CAFOs is appropriate.

Comment

One comment was that lagoons should be constructed so only direct rainfall, and not runoff, enters them.

Response

The lagoons or surface impoundments are constructed to Natural Resources Conservation Service (NRCS) guidelines to retain all process wastewater, a 24-hour, 25-year rainfall event and still have adequate freeboard to avoid a discharge. In most cases, sites are designed so as to prevent non-contaminated stormwater from entering the waste management system.

Comment

Permittee must post financial assurance bond to insure proper closure of lagoons.

Response

A closure plan for lagoons and, or manure storage buildings, is a required part of the NOI and becomes an enforceable part of the general permit coverage.

Comment

Another comment was that TDEC must canvass the state to find all CAFOs.

Response

The personnel in the eight TDEC Environmental Assistance Centers throughout the state are working to identify newly regulated CAFOs. Unpermitted operations, when located, are notified of permit requirements.

Comment

What is a 24-hour, 25-year rainfall event for Johnson County, Tennessee and how often does it occur?

Response

The term 25-year 24-hour rainfall event means the maximum 24-hour precipitation event with a probable recurrence interval of once in 25 years as defined by the National Weather Service. For Johnson County Tennessee, the 24-hour, 25-year rainfall event is five inches or more of rain according to the National Weather Service.

Comment

There were a number of questions asking how this CAFO general permit was going to regulate and control odors or air emissions, noise and light pollutions.

Response

It is beyond the scope of this general permit, and intent of the applicable NPDES rules and regulations to control odors, air emissions, noise or light pollution from a CAFO.

Comment

Are all records that are required to be kept by the permittee available to the public?

Response

All records (monitoring reports, NOI package, annual report) that are submitted to TDEC are available for the public in the Nashville Central Office. Other records kept by the permittee must be made available for inspection and may be submitted to the department upon request.

Comment

Rule 1200-4-5.14(4) gives the commissioner authority to designate animal feeding operation as a concentrated animal feeding operation. Similarly, the commissioner should define a Class II CAFO as needing an individual permit for the same reason.

Response

The permitting provisions of 1200-4-5.14(4) do not differentiate between general and individual permits. An individual permit may be employed only if general permit coverage is deemed inadequate to protect waters of the state.

Comment

CAFOs are a serious threat to karst systems, which in turn create a conduit to groundwater. Soil testing and geographic determination should be required for all proposed CAFO sites. No activities should be allowed that has the potential to interact with karst system.

Response

The general permit requires setbacks and, or buffers from sinkholes. Such features must be identified in the nutrient management plan and further investigated in the required subsurface investigation.

Comment

No coverage should be granted for a permit that is in dispute, and the burden must be on the applicant to show that there is no potential for harm to the environment or the community. The “no potential to discharge” is an enormous loophole in the regulatory process.

Response

Permit decisions must be made based on technical, environmentally-relevant information, even in the case of controversial projects. The “no potential to discharge” has almost the same information burden as the CAFO application. The applicant for the “no potential to discharge” is certifying that manure, wastewater and, or litter is not applied to land under the control of the CAFO. Any manure, wastewater and, or litter storage areas must be designed, constructed and maintained to prevent any discharge to waters of the state.

Comment

The company or integrator should be co-permitted along with the owner/operator and face the same liabilities along with the CAFO owner or operator.

Response

The NPDES regulations define the owner/operator, in 40 CFR122.2, as the owner/operator of the facility or activity. The permit or permit coverage is issued to the owner/operator, as identified on the application. Unless the integrator is a co-owner/operator, there is no regulatory basis for making the integrator a joint permit holder.

Comment

Several items pertaining to land application of process wastewater, litter or manure are grouped together in this comment.

- a. Land application of process wastewater or manure and the tile drains are, in fact, a discharge to waters of the state by a point source and must be permitted;
- b. The permit must prohibit the application of waste prior to or during precipitation events including rain, snow or onto frozen ground; or onto saturated soils or in an amounts that result in ponding;
- c. The permit must contain an enforceable requirement that nutrients are applied at an agronomic rate and;
- d. The permit needs 3rd party must have permit and NMP requirements for land application of process wastewater or manure.

Response

- a. Land application areas and tile drains are specifically excluded from the federal definition of point source in 40 CFR 122.3. Land application and tile drains do not require separate permitting unless process wastewater, litter or manure are applied in excess of the nutrient management plan (NMP) requirements or create a point source discharge.

The NMP must be consistent with the Natural Resources Conservation Service (NRCS) *Field Office Technical Guide* and the NRCS *Agriculture Waste Management Field Handbook*. Land application of manure in accordance with the NMP should preclude any direct discharges of manure into the waters of the state. Furthermore, the permittee is required to

adhere to provisions of the nutrient management plan so as to prevent over-application of nutrients to the receiving fields. By doing so, the permittee should prevent the introduction of nutrients to waters.

- b. The NRCS guidelines in chapter 11 of the Agricultural Waste Management Field Handbook lists when to and when not to apply organic waste to land including windy days, when the ground is frozen or snow covered or when the soil is saturated. The NMP, which must be consistent with the NRCS guidelines, establishes when the land application of manure or process wastewater may take place.
- c. The NMP, which is part of the application package, must be approved by Tennessee Department of Agriculture (TDA), and must be consistent with NRCS guidelines. Adherence to the requirements, conditions and guidelines in the site-specific NMP is enforceable through the permit.
- d. Regulating the activities of the 3rd party is beyond the scope of this permit for FO operations. However, any 3rd party, who receives 100 tons or more of manure or process wastewater, must indicate by signature on the *Agreement for the Removal of Litter, Manure and/or Process Waste from a APO* that the 3rd party understands the best management practices required to prevent runoff to surface waters.

Comment

Comments concerning the nutrient management plant (NMP) were:

- a. Notice of Coverage should not be issued until the NMP and the waste disposal system has been approved by the permitting authority;
- b. That the NMP become an enforceable part of the permit and;
- c. The NMP must be available to the public.

Response

- a. An owner/operator must submit a completed Notice of Intent (NOI) form along with a copy of a NMP to TDA. The NMP must be consistent with the current Natural Resources Conservation Services (NRCS) *Field Office Technical Guide* and the NRCS *Agriculture Waste Management Field Handbook*.

Once the NMP has been reviewed and approved (i.e. meeting the NRCS standards) by TDA, the complete package is forwarded to the division. The division will review the permit application and, proceed with the permitting process.

- b. Following the operational aspects of the NMP is an integral and enforceable part of the permit.
- c. The permit application package including the NMP and the closure plan are available for public review at TDEC's Nashville office or the TDA's Ellington Agriculture Center in Nashville.

Comment

The proposed permit failed to contain any enforceable operational requirements.

Response

The proposed permit has a number of explicit, enforceable requirements that are too numerous to be listed in this document. The permit clearly states that the CAFO is not authorized to discharge to the waters of the state except when either chronic or catastrophic rainfall events cause an overflow of process wastewater from a facility properly designed, constructed, maintained, and operated to contain:

- a. All process wastewater resulting from the operation of the CAFO (such as wash water, parlor water, watering system overflow, etc.); plus,
- b. All runoff from a 25-year, 24-hour rainfall event for the CAFO.

Comment

The permit needs additional monitoring, including up-gradient and down-gradient monitoring wells near the retention facility, upstream and downstream of the receiving stream listed on the permit, the stormwater runoff from the permitted facility as well as all fields receiving manure or process waste via 3rd parties from the permitted facility.

Response

Sampling is required in the event of a discharge. Additional sampling is at the discretion of the division, as necessary, to investigate any abnormal conditions in the receiving stream. Groundwater monitoring up gradient and down gradient of retention systems, at this time, would be voluntary. The monitoring of a non-permitted 3rd party is outside the scope of this permit.

Comment

Zinc, copper and E. coli should be included as monitored parameters.

Response

Foot washing baths, containing zinc and copper compounds, are part of a dairy operation. and will be included in the monitoring requirements. The E coli parameter will be added to the list of pollutants to be monitored, in the event of a discharge.

Comment

The permit fails to require measures to control the phosphorus discharge from the CAFO.

Response

The NMP, which is an enforceable part of the permit, addresses the land application and the control of the nutrients, including phosphorus.

Comment

TDEC's definition of a 25-year, 24-hour rain event including both chronic and catastrophic storm events is inconsistent with the Clean Water Act.

Response

The catastrophic and chronic events definitions were taken from definitions in the previous general CAFO permit and from the EPA definitions.

A "catastrophic event" is a rainfall event equal to or greater than the 25-year, 24-hour storm, or the occurrence of a tornado or other severe event as determined by the division that would cause an overflow from the waste retention structure.

A "chronic event" is a series of wet weather conditions that causes an overflow of process wastewater from a facility designed, constructed and operated to contain the entire process generated waste 24-hour rainfall event for the location of the point source.

Comment

TDEC personnel should conduct at least one unannounced random inspection with sampling per year. Industrial animal production sites need some form of checks and balances, and sampling by the regulators would provide a measure of additional control and monitoring verification.

Response

TDEC is committed to annual unannounced inspections of all individual CAFO permits. Part II.A.2 (*Right of Entry*) of the permit ensures that that unannounced inspections can be conducted and sampling would be done, in the event of a discharge. However, TDEC must work with its partner agencies such as TDA, and the NRCS to provide necessary oversight for medium facilities.

Comment

TDEC should move beyond the antiquated lagoon and spray field system and land application of manure from industrial animal production in order to protective of human health and the environment.

Response

TDEC is confident that a CAFO, when operated in accordance with the permit conditions and the NRCS field guides, will be protective of human health and the environment.

Comment

The 24-hour verbal reporting requirement for noncompliance should be changed to 6 hours or less.

Response

In accordance with the permit part II.C.2 the permittee shall make immediate oral notification within 24 hours to the division and notify the division in writing within 5 working days if for any reason a discharge occurs at the CAFO that could cause a threat to public drinking water supplies or human health. The permittee must state the description of the discharge, time and cause of the discharge at time of making oral notification. The division believes that 24 hours is an adequate time to allow the permittee to accurately assess the location and cause of the discharge. The division also believes that 24 hours is appropriate to allow the permittee to implement an immediate corrective action in order to eliminate the discharge as soon as it is discovered in order to quickly prevent future degradation to the waters of the state and to protect human safety and health.

Any reporting later than 24 hours after the discharge is in noncompliance.

The division's determination is to issue TNA000000 as drafted with the addition of a monitoring requirement for E. Coli.

Date: _____

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