



**TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION
DIVISION OF WATER POLLUTION CONTROL
401 CHURCH STREET
L & C ANNEX 6TH FLOOR
NASHVILLE TN 37243**

Addendum to Rationale
Including
Record of Comments and Responses
(Notice of Determination)

**General State Operating Permit for
Class II Concentrated Animal Feeding Operations (CAFOs)**

Permit No. SOPCD0000

October 29, 2010

Permit Change

This permit was drafted as a “General NPDES Permit for Class II Concentrated Animal Feeding Operation (CAFO).” After the draft permit was placed on public notice, the division received questions about the validity of being able to issue an NPDES permit for Class II CAFOs given the state law that was passed on June 1, 2009, that prohibited the issuance of an NPDES permit to a CAFO that was not required to have one under the federal Clean Water Act, see Tennessee Code Annotated, 69-3-108(b)(7). While federal law does not require Class II CAFOs to obtain a permit, Tennessee law does. As such, the division will be issuing the above-mentioned draft permit as a State Operating Permit. All applicable regulations have been changed to list the appropriate state requirement in the final permit.

Administrative Record

The permit rationale (or fact sheet) sets forth the Division of Water Pollution Control’s (division) basis for permit conditions to be applied statewide for the issuance of the new General State Operating Permit for Class II Concentrated Animal Feeding Operations (CAFOs). This CAFO General State Operation (SOP) Permit is intended to authorize the operation of a CAFO that is designed, constructed, operated or maintained such that a discharge could occur. Pursuant to the permit, no CAFO is authorized to discharge pollutants unless the discharge is a result of a rainfall event exceeding the 25-year, 24-hour storm event for existing CAFOs or new dairy or cattle CAFOs; or the rainfall event exceeds the 100-year, 24-hour storm for new swine and poultry CAFOs.¹

On December 21, 2009, the division published Public Notice #MMIX-024, which announced our intent to issue this new CAFO General State Operation Permit. Copies of the draft permit were made available in electronic format on the division’s web site at http://tn.gov/environment/wpc/ppo/cafo_draftgp.shtml. On December 16, 2009, the division issued Public Notice No. PH09 – 023, which announced the public hearings as listed below:

¹ This paragraph was corrected to match the authorized activities listed in the permit on January 11, 2012.

Date	City	Location	Time
Thursday, January 28, 2010	Martin	Martin City Hall 101 University Street Martin, TN 38327 (731) 587-3126	1:00 PM CST
Tuesday, February 2, 2010	Greeneville	Greeneville Light & Power G Thomas Love Boardroom 110 North College Street Greeneville, TN 37745 (423) 639-7105	1:00 PM EST
Tuesday, February 9, 2010	Shelbyville	Bedford County Courthouse 1 Public Square, Suite 101 (First Floor Courthouse) Shelbyville, TN 37160 (931) 684-7944	4:00 PM CST
Wednesday, February 10, 2010	Cleveland	Cleveland Public Library 795 Church St. Cleveland, TN 37311 (423) 472-2163	1:00 PM EST
Thursday, February 11, 2010	Livingston	Livingston City Hall 301 McHenry Circle Livingston, TN 38570 (931) 823-1269	1:00 PM CST

The division received comments through February 22, 2010.

Comments received and responses

1. Comment: The division received several comments regarding specific operations.

Response: The public notice and comment period were established to receive comments on the draft permits, SOPC00000 and TNA000000. Comments related to water quality concerns regulated by the draft permits were considered in the final permit actions. Comments related to a specific facility could not be factored into the final permit determination. However, the division is interested in hearing any comments that the public may have regarding water quality concerns. Water quality related comments regarding a specific operation should be directed to the local Environmental Field Office (EFO) by calling 1-888-891-TDEC.

2. Comment: Who makes sure that chemicals such as antibiotics and hormones do not pass from hog waste into lagoons?

Response: The division does not have specific numeric water quality criteria in its water quality standards that can be used in limiting discharges of antibiotics or hormones in animal waste.

3. Comment: Who monitors the rules for dead animal disposal and daily measuring of the lagoons to assure no overflow?

Response: The division periodically inspects facilities to ensure compliance with permit requirements. Mortality management and waste levels in lagoons/ponds are just two of the factors that inspectors look at to determine compliance. The division also

investigates complaints including reports of waste discharges. In addition, the permit requires permittees to keep records documenting weekly visual inspections of "...wastewater containment structures noting the liquid level in the containment structures," and to keep, "Weekly records of the depth of the manure and process wastewater in the liquid containment structure as indicated by the required depth marker. Note that the depth marker in the liquid waste containment structure will not include any storage volume for a design storm as no storm water is allowed to enter the liquid waste containment structure."

4. Comment: The division received several comments over concern about odor from CAFOs.

Response: The division does not regulate odor from CAFOs and is of the understanding that there are currently no odor regulations for CAFOs. The Division of Air Pollution Control may be contacted at the following address regarding questions about odor regulations:

Barry R. Stephens, Director
Tennessee Department of Environment and Conservation
Division of Air Pollution Control
401 Church St.
9th Floor L&C Annex
Nashville, TN 37243
(615) 532-0554

5. Comment: The division received several comments over concern for water contamination from CAFOs.

Response: CAFOs operated in compliance with this permit and all other state and federal rules and regulations should not contribute to contamination of water sources. CAFOs found to be contributing to the contamination of surface water may have to revise their nutrient management plan (NMP) to address the contamination or may be required to institute additional controls or to seek alternate permit coverage.

6. Comment: How are mortalities disposed of?

Response: Poultry operations typically compost mortalities while swine operations have historically used rendering although there is starting to be a shift to composting swine mortalities. Other practices may include burial or incineration. All mortality disposals must meet the requirements of NRCS conservation practice standard 316 (Animal Mortality Facility).

7. Comment: How do you compost mortalities? Once composted what do you do with the finished compost?

Response: Composting of animal mortalities must meet the requirements of NRCS conservation practice standard 317 (Composting Facility). Mortalities are layered with a bulking material, such as saw dust, in the compost pile. New mortalities may be added with additional bulking material, as needed. The compost pile is monitored and managed to achieve certain criteria, including moisture content and temperature, and will occasionally be turned/aerated to help maintain the necessary criteria.

Finished compost may then be land applied in accordance with the requirements of NRCS conservation practice standards 590 (Nutrient Management) and 633 (Waste Utilization).

8. Comment: How do you monitor swine waste disposed of in under-barn pits?

Response: Permittees are required to maintain records of the liquid levels in their pits to ensure adequate capacity. All waste stored in under-barn pits must also be handled in accordance with the requirements of the CAFO's permit and their approved NMP.

9. Comment: What are the restrictions on transferring poultry litter to third-parties?

Response: Any poultry operation is allowed to transfer poultry litter to a third-party. However, the following restrictions apply to operations that transfer more than 100 tons of manure, litter or process wastewater per year must adhere to the following requirements, as listed in subpart 4.9 of the permit.

- A. *Provide the recipient of the manure, litter or process wastewater with the most current nutrient analysis, consistent with 40 CFR § 412; and*
- B. *Ensure that the recipient sign the Agreement for the Removal of Litter, Manure and/or Process Wastewater from an AFO using the form in Appendix C. The permitted CAFO must keep a copy of the signed Agreement along with other records required by this permit, per subpart 5.2 below.*

In addition, CAFOs that transfer 100 tons of manure, litter or process wastewater to a third part must retain for five years records of the date, recipient name and address, and approximate amount of manure, litter or process wastewater transferred to a third party using the form in Appendix D below.

10. Comment: What does an operation do if their lagoon levels get too high?

Response: Should an operation's lagoon or other liquid waste storage structure get too full during a time when the operation is not authorized to pump out the waste for land application, the operation should immediately contact the local EFO to request permission for a partial pump-out. Determinations will be made on a case-by-case basis. The following section was added to the permit to address this issue:

4.6. Anticipated Discharges/Overflows

Should a CAFO covered by this permit anticipate a discharge/overflow from a liquid waste management system, the CAFO must immediately contact their local EFO (see subpart 1.2 above). The EFO will determine if permission may be granted for a partial emergency pump-out with either off-site disposal or land application of the pumped-out waste. Factors that may be considered by the EFO prior to making a determination to authorize land application include: field cover, past and anticipated weather, TDA recommendations, etc.

11. Comment: Why does the state require permits for CAFOs?

Response: Tennessee's Water Quality Control Act requires that operations that have the potential to impact waters of the State of Tennessee be permitted by the Department of Environment and Conservation. CAFOs have the potential to impact waters of the state and are identified as one of the activities requiring a permit.

12. Comment: TCWN requests those CAFOs discharging to waters with unavailable conditions for pathogens or nutrients to be deemed ineligible for coverage under this general permit.

Response: Existing facilities will be eligible for coverage under this permit as long as they do not meet the definition of a new source. If a TMDL has been developed for the receiving waters for nutrients or pathogens, any new sources will have to comply with the terms of the TMDL. If a TMDL has not been developed for the receiving waters then a new facility will not be eligible for coverage under this permit and will have to be designed such that it is not constructed, operated or maintained such that a discharge could occur and that facility would have to obtain coverage under the General State Operating Permit for Concentrated Animal Feeding Operations (CAFOs), Permit Number SOPC00000. The following language with these requirements has been inserted as subpart 1.4 of the permit:

1.4 Discharges into Waters with Unavailable Conditions

- A. This part of the permit applies to all existing or proposed discharges into waters with unavailable conditions. Waters with unavailable conditions exist where water quality is at, or fails to meet, the criterion for one or more parameters. In unavailable conditions, new or increased discharges of a substance that would cause or contribute to a condition of impairment will not be allowed. Where impairment by habitat alteration exists, additional significant loss of habitat within the same area of influence shall not be authorized unless avoidance, minimization, or in-system mitigation can render the impact de minimis.*

Pollutants of concern associated with CAFOs are typically nutrients and/or pathogens. Coverage under this permit, is not available to new CAFO discharges into receiving streams with unavailable conditions for nutrients and/or pathogens. Discharges upstream of waters with unavailable conditions can only be allowed if they are not likely to contribute pollutants for which the receiving water is impaired in amounts that are measurable in the impaired segment. The owner or operator must satisfy the following conditions to be eligible to obtain and maintain coverage under this permit:

- i. Before a Total Maximum Daily Load (TMDL)*

Existing Discharges. These are discharges other than expanded dischargers from facilities that were in existence on August 5, 2009 (expiration date of the previous CAFO general permit). It is one of

the purposes of this general permit not to authorize the discharge of pollutants in such a manner as to cause or contribute to a violation of any water quality standards. Therefore, if a Total Maximum Daily Load (TMDL) (TMDL information is available at <http://www.state.tn.us/environment/wpc/tmdl/>) has not been developed at the time of filing of the Notice of Intent (NOI), in order to obtain coverage under this permit the owner or operator must certify that the control measures selected for the site are the most appropriate for the reduction of pollutants at the site and that these treatment methods and control measures are designed, and will be implemented to effectively minimize contributions of pollutants of concern. A failure to implement treatment methods and control measures so as to minimize contributions of those pollutants is a violation of this permit.

New or Expanded Discharges. New discharges are ones from facilities that were not in existence on August 5, 2009. Expanded discharges are ones from sites that since August 5, 2009 have increased loading of a pollutant of concern from the site. Permit coverage for new or expanded discharges of a pollutant of concern is not available under this permit and the owner or operator must design their facility such that it does not discharge and is not designed, constructed, operated, or maintained such that a discharge could occur and must seek coverage under the General State Operating Permit for Concentrated Animal Feeding Operations (CAFOs) that do not discharge, Permit Number SOPC00000.

ii. After a Total Maximum Daily Load (TMDL)

If a Total Maximum Daily Load (TMDL) has been developed and approved for the receiving water body, where the discharge is new, expanded or existing, discharges from the facility must be consistent with the applicable provisions of the TMDL.

B. Issuance of a Notice of Coverage (NOC) under this general permit will constitute confirmation of the division's finding that the discharges authorized by this general permit are either:

- not into waters with unavailable conditions; or*
- the nature of the discharge is not likely to contribute pollutants of concern, for which the unavailable conditions exist, in amounts measurable in the segment with unavailable conditions.*

C. If the division determines at any time that the discharge is causing or contributing to a violation of water quality standards or if the division has any other grounds for modifying or revoking this permit, the division may require corrective action or require the discharge be permitted

differently in accordance with subpart Error! Reference source not found. (Planned Changes).

- 13. Comment:** **Section 1.5 Authorization – This language should make clear the intent of the permit. It is recommended the entirety of Section 1.5 be removed and replaced with:**

This permit authorizes the operation of a CAFO designed, constructed, operated or maintained such that a discharge could occur in the State of Tennessee. No CAFO is authorized to discharge without an NPDES permit. Pursuant to this permit, no CAFO is permitted to discharge pollutants unless the discharge is a result of a rainfall event exceeding the 25-year, 24-hour storm event for existing CAFOs or new dairy or cattle CAFOs; or the rainfall event exceeds the 100-year, 24-hour storm for new swine and poultry CAFOs.

This permit does authorize the discharge of uncontaminated stormwater runoff regardless of the magnitude of the storm event. This permit prohibits the discharge of process wastewater pollutants to waters of the State of Tennessee unless as a result of the above mentioned storm events. CAFOs must have all measures, structures, etc. in place and fully implemented according to their nutrient management plan (NMP) approved by the Tennessee Department of Agriculture, on the permit coverage effective date.

- Response:** This subsection has been modified based on this recommendation. It now reads as follows:

This permit authorizes the operation of a Class II CAFO that is designed, constructed, operated or maintained such that a discharge could occur in the State of Tennessee. Pursuant to this permit, no CAFO is authorized to discharge pollutants unless the discharge is a result of a rainfall event exceeding the 25-year, 24-hour storm event for existing CAFOs or new dairy or cattle CAFOs; or the rainfall event exceeds the 100-year, 24-hour storm for new swine and poultry CAFOs.

The permit does authorize the discharge of uncontaminated stormwater runoff regardless of the magnitude of the storm event. This permit prohibits the discharge of process wastewater pollutants to waters of the State of Tennessee unless as a result of the above mentioned storm events. CAFOs must have all measures, structures, etc. in place and fully implemented, according to their nutrient management plan (NMP) approved by the Tennessee Department of Agriculture, on the permit coverage effective date.

- 14. Comment:** **Section 1.6.1. Notice of Intent (NOI) – You should add “do one of the following” after “Upon completing NOI review, the division will” in order to clarify the actions.**

- Response:** This recommended change was made to the final permit.

- 15. Comment:** **Section 1.8.1. Notice of Termination – You should add the language below after the existing language in order to clarify the process requirements (adapted from Tennessee’s General NPDES permit for discharges of storm water associated with construction activities):**

The CAFO operator must retain permit coverage until the facility, or the portion of the facility, requesting permit coverage termination is properly closed in accordance with the facility’s plan requirements established in Section 4.11.

When the initial permittee ceases to have operational control over the permitted facility, the termination of coverage will be effective when the replacement NOC has been issued to the new operator (transfer of coverage) according to requirements in Sections 1.7.1 and 2.1.4.

The division will review NOTs for completeness and accuracy and, when necessary, investigate the CAFO for which the NOT was submitted. Upon receiving the NOT, the Division will prepare and transmit a notification the NOT form was received and is under review. If all conditions have been met, the Division will notify the permittee of approval of the NOT. If there are deficiencies with the NOT, the Division will notify the applicant of needed changes to their NOT submittal. If all conditions have not been met, the Division will deny the request for termination of coverage under this general permit. A NOT is not final until accepted by the Division.

The Division retains the right to deny termination of coverage under this general permit upon receipt of the NOT. If the EFO has information indicating the permit coverage is not eligible for termination, written notification will be provided that permit coverage has not been terminated. The notification will include a summary of existing deficiencies.

- Response:** The following language was added to the referenced section:

The CAFO operator must retain permit coverage until the facility is properly closed in accordance with the facility’s NMP and the requirements established in subpart 4.10 below of this permit.

The division will review termination requests for completeness and accuracy and, when necessary, investigate the CAFO for which termination was requested. If all conditions have been met, the division will notify the permittee of approval of the termination request. If there are deficiencies with the termination request, or if the division has information indicating the permit coverage is not eligible for termination, the division will notify the applicant of needed changes. If all conditions have not been met, the division will deny the request for termination of coverage under this general permit and will provide written notification that permit coverage has not been terminated. Permit coverage termination is not final until accepted by the division.

The division retains the right to deny termination of coverage under this general permit upon receipt of the NOT.

16. Comment: **Section 2.1.1. Existing Site – Language should be included also explaining necessary change of coverage from the General NPDES Permit for Class II CAFOs, not solely an individual NPDES permit.**

Response: The section was modified to clarify the application requirements for previously permitted facilities. It now states:

Existing operations, including those that were covered under the General NPDES Permit for Class II Concentrated Animal Feeding Operation (permit number TNA000000), that meet the definition of a Class II CAFO and that discharge or that are designed, constructed, operated or maintained such that a discharge could occur must seek coverage under this permit per the application requirements of subpart 1.5 above. Applications must be submitted not more than one year following the effective date of this permit.

17. Comment: **Section 3.1.E – Is the direct contact exclusion only applicable during the confinement period? Since by definition, a CAFO is a facility that confines the animals for at least 45 days a year, this line needs clarification. It is recommended to add “at any time” to the end of this sentence so as not to be interpreted as applying solely to those days of confinement.**

Response: This paragraph requires that the NMP include measures so as to prevent the direct contact of **confined** animals with waters of the state. This means that the confinement areas must be located away from waters of the state.

18. Comment: **Section 3.K – Remove “(a)” at the end to clarify this reference requires the incorporation of all activities in Tenn. Comp. R. and Regs 1200-4-5-.14(12).**

Response: All of the requirements included in TDEC regulation 1200-4-5-.14(12) are already included in this permit so this reference is redundant. This was done in part to ensure that if the regulations are renumbered that this requirement is still an enforceable part of this permit. As such, paragraph K has been deleted from this permit.

19. Comment: **Section 4.1 Production Areas – The language in this section contradicts that in Section 1.5. Wastewater discharges containing pollutants are prohibited by Section 1.5, but provided for in Section 4.1 with limitations. Since a “production area” is defined in Section 7 as those areas containing animals or waste, it is not possible to have a discharge from a production area which has not come into contact with “animals or manure or waste.” For the purposes of consistency and maintaining the intent of the permit. TCWN recommends Section 4.1 read as follows:**

All discharges of pollutants from a CAFO production area to waters of the State of Tennessee are prohibited. Permitted facilities must be properly designed, constructed, maintained, and operated to contain all process wastewater resulting from the operation of the CAFO (such as wash water, parlor water, watering system overflow, etc.).

Response: This permit does allow the discharge of wastewater provided that the discharge results from rainfall events exceeding the 25-year, 24-hour storm for existing CAFOs or new dairy or cattle CAFOs; or rainfall events that exceed the 100-year, 24-hour storm for new swine or poultry CAFOs. As such, this section was clarified and now reads as follows:

All wastewater discharges from a CAFO production area to waters of the State of Tennessee are prohibited unless the discharge results from rainfall events exceeding the 25-year, 24-hour storm for existing CAFOs or new dairy or cattle CAFOs; or rainfall events that exceed the 100-year, 24-hour storm for new swine or poultry CAFOs. Permitted facilities must be properly designed, constructed, maintained, and operated to contain all process wastewater resulting from the operation of the CAFO (such as wash water, parlor water, watering system overflow, etc.).

20. Comment: Section 4.2, “Land Application Areas,” needs to explain that discharges from fields that have properly applied nutrients are considered to be agricultural runoff.

Response: Section 4.2 was edited to explain the agricultural stormwater runoff exemption and now reads:

Discharges of agricultural stormwater from land application areas are allowed so long as they meet the following requirements;

- A. The NMP must be fully implemented by the effective date of the NOC.*
- B. Inspections and records shall be maintained as specified in part 5 below.*

21. Comment: Section 4.5.1 Discharge Notification – Again, for the purposes of consistency and maintaining the intent of the permit, TCWN requests the first line of this section read as follows:

If for any reason, there is a discharge of pollutants to waters of the state ...

Response: This recommended change was made to the final permit.

22. Comment: Section 4.10.1.D General Requirements – Remove the following language: “and which could reasonably have resulted from waste management at the facility.” Removal of this portion ensures the Division will be notified regarding any significant wildlife kill or die-off and provide the Division the discretion to determine if the event was a result of activities at the facility.

Response: This recommended change was made to the final permit.

23. Comment: Section 4.10.2.B Land Application of Animal Waste – Manure analysis for nitrogen and phosphorus should be conducted more frequently when the facility is adjacent to nutrient impaired waters. It is critical to know if a facility

is causing or contributing to a condition of pollution and be able to take corrective actions immediately. It is recommended a facility adjacent to waters impaired for nutrients be required to perform manure analysis for Total Nitrogen and Total Phosphorus on waste which is land applied on a quarterly basis.

Response: Manure, litter, or process wastewater from CAFOs is typically land applied based on crop needs centered around when the crop is planted; typically there is no land application of waste during November, December, January, and February. Manure analysis during the periods of no land application would be an unnecessary requirement and would not yield any useful information as relates to water quality. In addition, the nutrient content of manure, litter, or process wastewater will not significantly change from month-to-month, unless an operator changed the animal inputs, such as feed and/or supplements. The manure analysis frequency requirement will remain annual.

24. Comment: Section 4.10.2.D.i. Land Application of Animal Waste – The setback should be 150 feet. Should also include additional requirements to protect for water quality and adjacent properties:

- **Application can be no closer than 100 feet from the CAFO property line.**
- **Application can be no closer than 200 feet from waters impaired by pathogens or nutrients.**

Response: A setback of 100 feet from down-gradient surface waters, open tile line intake structures, sinkholes, agricultural wells, or other conduits to surface waters is the appropriate distance based on recommendations by the University of Tennessee Extension.

25. Comment: Section 4.10.2.F Land Application of Animal Waste – Replace with the following language to clarify when application is restricted:

There must not be land application of nutrients, including manure, litter or process waste water within 24 hours of a precipitation event which may cause runoff from the land application area. Application of waste to flooded ground, saturated soils, or frozen ground is prohibited.

Response: This subsection has been modified based on this recommendation. It now reads as follows:

There must not be land application of nutrients, including manure, litter or process waste water, within 24 hours of a precipitation event that may cause runoff from the land application area. The operator shall not land apply nutrients to frozen, flooded, or saturated soils.

26. Comment: Section 4.10.2. Land Application of Animal Waste – Add a new subsection with the following additional requirement:

There can be no summer application of solid or liquid waste to harvested crops unless cover crop is planted for the remainder of the growing season.

Response: The timing of land application of animal waste and crop planting schedules are a part of a facility's NMP, which must be reviewed and approved by the TDA prior to issuance of a facility's notice of coverage (NOC). Any land application of animal waste that doesn't follow the facility's NMP is a violation of the facility's permit coverage. In addition, this section already contains a requirement that "Application rates for manure, litter, or other process wastewater applied to land under the ownership or operational control of the CAFO must minimize phosphorus and nitrogen transport from the field to surface waters..." Additional restrictions are not required.

27. Comment: Compliance should have to be maintained from a permittee's permit coverage date, not from the effective date of the permit, subpart 4.8 needs updated accordingly.

Response: Subpart 4.8 has been updated as suggested. It now reads: "*Full compliance and operational levels shall be attained from the effective date of a permittee's Notice of Coverage.*"

28. Comment: Section 4.12 Transfer to Third Party – The opening paragraph should ensure land application is addressed unless the entirety of the waste produced on-site is removed. TCWN recommends the following language replace the first sentence:

In cases where CAFO-generated manure, litter, or process wastewater is sold or given away in its entirety to be used for land application activities that are not under the control of the permitted CAFO, land application does not need to be addressed in the permitted CAFO (C)NMP.

Response: This recommended change was made to the final permit.

29. Comment: Section 4.13.C Closure Plan – The "later date" for which any earthen basin not in use may come back into use must have a limit. The permittee must be required to close the basin if it is not to be used within the next 12 months.

Response: This section allows for the maintenance of an earthen basin that is not in use, provided that the permittee "*maintain(s) the structure as though it were actively in use, to prevent compromise of structural integrity.*" Proper maintenance of the earthen basin should protect the quality of surface water and groundwater resources. Additional restrictions in this section are not needed.

30. Comment: **Section 4.14 Mortality Management – In addition to compliance with NRCS conservation practice standard 316, TCWN requests additional mortality management requirements be included to protect water quality from pollutants associated with agricultural mortality. Burial and disposal pits must be outside of the 100-year floodplain and at least 300 feet from surface waters or conduits to surface waters. If this is not feasible, the permittee must use incineration or composting as means of managing mortality.**

Response: NRCS Conservation Practice Standard 316 (Animal Mortality Facility) requires the following for all animal mortality facilities: “Locate the facility above the 100-year floodplain; however, if site restrictions require location within a floodplain, protect the facility from inundation or damage.” This standard further requires, “Where seepage from mortality facilities will create a potential water quality problem and it is deemed necessary to reduce seepage, use AWMFH (Agricultural Waste Management Field Handbook), Appendix 10D, for clay liner design criteria, or other acceptable liner technology.” No additional requirements are necessary.

However, the division did add a requirement to this section to prohibit the discharge of pollutants to waters of the state from permitted CAFO mortalities. Section 4.10 now reads as follows:

The permittee must ensure proper management of mortalities (i.e. dead animals) so that they are not disposed of in a liquid manure, stormwater, or process wastewater storage or treatment system that is not specifically designed to treat animal mortalities. Mortalities must be handled in such a way as to prevent the discharge of pollutants to surface water. At a minimum, the requirements of NRCS conservation practice standards 316 (Animal Mortality Facility) and 317 (Composting Facility) must be followed, as applicable.

31. Comment: **Section 5.1 Inspections – Include the following language at the end of this section in accordance with EPA’s national effluent limitations guideline (Federal Register, Vol. 68, No. 29):**

Correct any deficiencies found as a result of daily and weekly inspections as soon as possible.

Response: This recommended change was made to the final permit.

32. Comment: **References to impoundments, such as those found in subpart 5.2, should be changed to be listed as containment structures, as not all wastewater storage structures are in the form of an impoundment.**

Response: This recommended change was made to the final permit.

33. Comment: **Section 6.7.1 Requiring an NPDES Permit – This language does not seem applicable to the general NPDES permit for Class II CAFOs. TCWN recommends the following replace the language in this section:**

6.7.1 Requiring an Individual NPDES Permit

The following conditions require a Class II CAFO to apply for coverage under an individual NPDES permit:

- 1. Conditions at the CAFO change such that the CAFO falls into the definition of a Class I CAFO, or*
- 2. The receiving waters of the Class II CAFO discharge have unavailable conditions for pathogens or nutrients, or*
- 3. At the discretion of the Commissioner.*

Response: This subsection has been modified based on this recommendation. The final language reads as follows:

When conditions at a CAFO change such that the CAFO is designed, constructed, operated or maintained such that a discharge could occur increases in size to the extent that they meet the definition of a large (Class I) CAFO, the owner/operator of the CAFO must seek an individual NPDES Permit. The owner/operator shall submit an individual application (Forms 1 and 2B) and other applicable information.

34. Comment: **The noncompliance subpart (6.19) needs to explain what an operation must do if there is a discharge to a waterbody of the State.**

Response: The following language was added to subpart 6.19:

If for any reason, there is a discharge to a waterbody of the state or an overflow or discharge from a waste retention structure, the permittee shall make immediate oral notification within 24-hours to the Division of Water Pollution Control (division) by calling 1-888-891-TDEC and shall notify the division's local EFO (as listed in subpart 1.2 above) in writing within five working days of the discharge from the facility. The written notification must include a description of the discharge (including the cause and flow path of the discharge), volume of discharge, time of discharge, and the cause of the discharge.

35. Comment: **Section 7 Definitions – (2) AFO Overflow: The term “AFO overflow” is not used in this permit. TCWN recommends “AFO” be removed from the definition and requests the definition of “overflow” accurately reflect its usage in this permit.**

Response: The definition for “AFO overflow” was deleted from the final permit. In addition, the discharge notification requirements from section 4.4.1 were clarified to add the requirement that the permittee notifies the division of any overflows or discharges of pollutants to waters of the state. The following definition for overflow was also added to part 7 of the final permit.

"Overflow" means any release of manure, litter, or process wastewater from any portion of the collection, transmission, or treatment system other than through permitted outfalls.

36. Comment: Section 7 Definitions – (3) AFO Production Area: Again, the term “AFO production area” is not used in this permit. TCWN requests “AFO” be removed from this definition.

Response: The definition for “AFO production area” was deleted from the final permit. The following definition for “production area” was added to the permit.

“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.*

37. Comment: Section 7 Definitions – New definitions: The term “waste” is used frequently in this permit, however a definition is not provided. TCWN requests a definition for “waste” be included in the definitions section.

Response: A definition for waste is not necessary in this permit.

38. Comment: Section 7 Definitions – New definitions: TCWN has proposed the addition of the term “pollutants” in these comments. If TDEC adopts these changes, it should define this term using the meaning found in the Clean Water Act.

Response: The following definition for pollutant, taken from TDEC Rule 1200-4-5 was added to the final permit.

“Pollutant” means sewage, industrial wastes, or other wastes.

A definition for sewage was also added to the final permit to clarify the meaning of the definition of pollutant.

“Sewage” means water-carried waste or discharges from human beings or animals, from residences, public or private buildings, or industrial establishments, or boats, together with such other wastes and ground, surface, storm, or other water as may be present.

- 39. Comment:** **Appendix B. Subsection H. Agreement for the Removal of Litter, Manure, and/or Process Wastewater from an AFO – Proper setback limits are necessary in this subsection. TCWN recommends the following:**

A buffer zone of 100 feet is required between the application sites and adjacent streams, lakes, ponds, sinkholes, springs and wells.

Response: The division does not have the regulatory authority to require third-party recipients of manure, litter, or process wastewater to implement buffer zones.

- 40. Comment:** **Appendix B. Subsection I. Agreement for the Removal of Litter, Manure, and/or Process Wastewater from an AFO – Proper application restrictions are necessary in this subsection. TCWN recommends the following:**

There must not be land application of nutrients including manure, litter or process waste water, within 24 hours of a precipitation event which may cause runoff from the land application area. Application of waste to flooded ground, saturated soils, or frozen ground is prohibited.

Response: The division does not have the regulatory authority to require third-party recipients of manure, litter, or process wastewater to restrict their land application timing.

- 41. Comment:** **A blank DMR (discharge monitoring report) form should be included in the permit so permittees have it available to complete if they do have a discharge.**

Response: Discharge Report Forms for the required sampling parameters shown in section 4.4.2 have been included as Appendix B in the final permit.

- 42. Comment:** **The Notice of Intent (NOI) needs revised to include boxes to indicate which general permit the applicant is applying for, SOP or NPDES.**

Response: The NOI has been revised to allow the applicant three choices for the type of permit application they are submitting.

- 43. Comment:** **Revise the Agreement for the Removal of Litter, Manure and/or Process Wastewater from an AFO to include the amount (tons) of litter removed.**

Response: The Agreement for the Removal of Litter, Manure and/or Process Wastewater from an AFO (Agreement) was revised to include space to record the amount of waste removed.

- 44. Comment:** **Revise Item H of the Agreement for the Removal of Litter, Manure and/or Process Wastewater from an AFO to specify the length (in feet) buffer zone from wells, receiving streams, schools, residencies and property lines.**

Response: Item H of the Agreement was revised to include NRCS recommended non-application buffer widths for wells, waterbodies, public use areas, and residences.

45. Comment: More training on the permit requirements is needed.

Response: The division will be working with the USDA NRCS to help educate and train NRCS staff regarding CAFO permit requirements. Division staff are always available to answer questions regarding permit requirements and to help producers maintain compliance with their CAFO permits.

46. Comment: Operators do not know if a permit is necessary. How does the division reach them and educate them?

Response: CAFO permitting was instituted in the State of Tennessee in 1999. It is unlikely that producers do not know about the requirements. However, the division does maintain a webpage, available at: <http://tn.gov/environment/permits/cafo.shtml>, which provides information about permit applicability and requirements. In addition, the division has worked with the Tennessee Department of Agriculture, the USDA NRCS, University of Tennessee Extension, and the Tennessee Farm Bureau regarding CAFO permit requirements and regulations; in turn these agencies educate their community regarding CAFO regulations.

47. Comment: What are examples of no discharge systems? How does somebody know which permit they need to apply for?

Response: No discharge systems are operations that are designed, constructed, operated or maintained such that a discharge could not occur. Examples include poultry operations with dry waste management and swine operations with under barn waste pits. Any operation with a liquid waste management system desiring coverage under this permit would have to have their liquid waste management system covered in a way that would prevent all rainwater from entering the waste storage facility (i.e. a covered waste tank or lagoon).

Should a CAFO owner/operator have a question about which permit they need to apply for they should contact the division for assistance. The division can be reached by calling 1-888-891-TDEC.

48. Comment: What are the fees associated with the permit? With the different permit types?

Response: There are no fees associated with this general permit. Facilities covered under this permit (SOPCD0000) or under the General SOP for CAFOs (SOPC00000) will not require any fees. Facilities that meet the definition of a Class I CAFO that are designed such that a discharge could occur will have to obtain an Individual NPDES permit, which currently has an annual maintenance fee of \$350.

49. Comment: The division should send the permittees a copy of the permit with their NOC.

Response: Upon issuance of this permit the division will send current permittees a copy of the general SOP that the division believes is applicable for that facility, and a partially

completed NOI, along with instructions and deadlines for applying for permit coverage.

50. Comment: How does the SOP work?

Response: A State Operating Permit (SOP) is implemented in much the same way as an NPDES permit. Permittees may expect their permit tracking numbers to change, but both SOP and NPDES permits have the same basic requirements and are instituted in a similar manner. However, SOPs are not subject to EPA review.

51. Comment: The table listing the animal numbers should separate ducks (liquid) from ducks (dry).

Response: The list of animal types and numbers, provided in subpart 1.3 of this permit, permit number SOPCD0000, was updated to ensure that it matched the categories listed in 40 CFR 122.23 (Concentrated animal feeding operations).

52. Comment: Section 4.10.2.D., Land Application of Animal Waste, should be revised to remove the word "heads" following agricultural well.

Response: This recommended change was made to the final permit.

53. Comment: Rainfall monitoring is not a land use requirement and should go somewhere else.

Response: Section 4.1.3. Rainfall monitoring has been moved to appear as subpart 4.3.

54. Comment: Subpart 5.2, item M, needs to clarify that annual manure, litter, and/or process wastewater testing is required.

Response: Subpart 5.2, paragraph M was divided into two paragraphs. It now reads as follows:

M. Results from annual manure, litter, and/or process wastewater sampling;

N. Results from most recent soil sampling;

55. Comment: The Tennessee Department of Agriculture requested that they not be sent copies of the annual report.

Response: Subpart 5.3 was updated to show that in addition to submitting a copy of their annual report to the appropriate EFO, that facilities covered under this permit must submit a copy of their annual report to the Nashville Central Office Enforcement and Compliance Section at the address listed below:

**Tennessee Division of Water Pollution Control
Enforcement and Compliance Section
Attention: Compliance Review
6th Floor L & C Annex
401 Church Street
Nashville, TN 37243**

56. Comment: A definition for a “rainfall event” needs included in the permit.

Response: The following definition for a “rainfall event” was added to the final permit:

*A **rainfall event** is defined as any occurrence of rain, preceded by 10 hours without precipitation that results in an accumulation of 0.01 inches or more. Instances of rainfall occurring within 10 hours of each other will be considered a single rainfall event. Ten -year, 24-hour rainfall event, 25-year, 24-hour rainfall event, and 100-year, 24-hour rainfall event are mean precipitation events with a probable recurrence interval of once in 10 years, or 25 years, or 100 years, respectively, as defined by the National Weather Service in Technical Paper No. 40, ‘Rainfall Frequency Atlas of the United States,’ May, 1961, or equivalent regional or state rainfall probability information developed from this source.*

57. Comment: A definition for a “discharge” needs included in the permit.

Response: The following definition for a “discharge” or “discharge of pollutant” was added to the final permit:

***Discharge or discharge of a pollutant** refers to the addition of pollutants to waters from a source.*

58. Comment: A definition for an “application” needs included in the permit.

Response: The following definition for an “application” was added to the final permit:

*For this purpose of this permit, an “**application**” includes a Notice of Intent (NOI), a site-specific nutrient management plan (NMP), and a closure plan.*

59. Comment: A definition for a “catastrophic event” needs included in the permit.

Response: The following definition for a “catastrophic event” was added to the final permit:

*A “**catastrophic event**” is a rainfall event greater than the 24-hour, 25-year storm for existing CAFOs or new dairy or cattle CAFOs, or the 100-year, 24-hour rainfall event for a new hog or poultry CAFOs, or the occurrence of a tornado or other severe event as determined by the division which would cause an overflow from the waste retention structure that is designed, constructed, operated, and maintained to meet all the requirements of this permit.*

60. Comment: A definition for a “dry waste management” needs included in the permit.

Response: The following definition for a “dry waste management” was added to the final permit:

“Dry waste management” refers to systems where continuously overflowing watering systems are not used and birds are raised in an enclosed building with earthen or concrete floors spread with layer of sawdust, wood shavings, rice hulls, or chopped straw.

61. Comment: Subpart 6.6 (Planned Changes) needs edited to clarify redundant language for requirements that were listed in subpart 3.2.D (NMP Implementation) of the permit.

Response: Subpart 6.6 was edited and now reads as follows:

The permittee shall give notice to the director as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when the alteration or addition to a permitted facility is considered a new source per 1200-4-5-.02 (54).

62. Comment: It isn't clear if a closure plan is required as part of the CAFO's permit application.

Response: Subpart 1.6 was clarified to include the requirement to submit a site-specific NMP. It now reads as follows:

Submitting a complete notice of intent (NOI), a site-specific nutrient management plan (NMP), and a closure/rehabilitation plan for the waste system storage/treatment structure(s) is required to obtain coverage under this general permit. Requesting coverage under this permit means that an applicant has obtained and examined a copy of this permit, and thereby acknowledges the applicant's claim of ability to be in compliance with this permit's terms and conditions.

Section 1.6.3 (Nutrient Management Plan) was broken into two sections to separate the NMP requirements and the closure plan requirements and now reads as follows:

1.6.3. Nutrient Management Plan (NMP)

All CAFOs wishing to obtain coverage under this permit must develop and submit a site-specific NMP with the NOI, in accordance with the requirements of part 3 below.

1.6.4. Closure Plan

Operators wishing to obtain coverage under this permit must also submit a closure/rehabilitation plan for the waste system storage/treatment structures that meets or exceeds NRCS technical standards and guidelines, and at a

minimum, addresses maintenance of the facility until proper closure is completed and includes a proposed schedule for closure not to exceed 360 days, in accordance with the requirements of subpart 4.12 below.

In addition, the following language was added to section 2.3.1 (Content) as paragraph e):

A copy of the closure plan for the CAFO;

Finally, a check box for a closure plan was added to the NOI form, to remind the applicant that they must submit a closure plan in addition to an NOI and NMP as part of their permit application.

63. Comment: Should the effective date referenced in subpart 4.8 (Schedule of Compliance) be for the effective date of a CAFO's NOC?

Response: Yes, this subpart has been corrected and now reads, "*Full compliance and operational levels shall be attained from the effective date of a permittee's Notice of Coverage.*"

64. Comment: The division should not require a CNMP for any CAFOs.

Response: All CAFOs covered by this permit will be required to submit for approval a site-specific nutrient management plan (NMP), per the requirements of part 3 of the permit. They may submit a CNMP in lieu of the site-specific NMP. All references to a CNMP have been removed from the final permit.

65. Comment: CAFOs should have to submit their application 180 days prior to commencing operation if they were constructed after April 14, 2003.

Response: Section 2.3.2 was edited to require CAFOs to seek permit coverage under this permit 180 days before commencing operation if they were constructed after April 14, 2003.

66. Comment: The first paragraph of the nutrient management plan requirements needs clarified. As it is written it makes it seem that a Class I CAFO is eligible for coverage under this permit.

Response: The first paragraph under this part was edited to clarify the requirements. It now reads:

All CAFOs described in subpart 1.3 above, (medium operations and designated CAFOs that discharge or that are designed, constructed, operated, or maintained to discharge) must develop, submit for TDA-approval, implement and keep on site a site-specific nutrient management plan (NMP) that:

67. Comment: **The second set of BMP requirements needs clarified to require that the permittee is required to follow the terms of their NMP, that changes to the NMP must be reviewed and approved by the state, and that a copy of the NMP must be kept on site at all times.**

Response: The recommended changes were made. In addition, the second set of BMP requirements were put under the subpart heading of “3.2 NMP Implementation.” This subpart now reads:

The following are additional requirements that apply to all CAFOs covered under this general permit:

- A. All permittees covered under this permit must comply with the terms of the site-specific NMP as identified in subpart 3.1 above.*
- B. All permittees covered under this permit must have all measures, structures, etc., of their NMP in place and fully implemented upon the effective date of their NOC.*
- C. In addition to NRCS technical standards, NMPs must address facility maintenance until all manure and/or litter is transferred to a third party or land applied in accordance with the NMP.*
- D. Permittees must annually review and update their NMP whenever there have been significant changes that affect the amount of manure produced, such as the number of animals on site; changes in how the manure is handled, stored, transferred, or land applied; or changes to how animal mortalities are handled. The permittee shall notify the director of these changes per subpart 6.6 below. Such changes must be reviewed and approved by the state.*
- E. A copy of the NMP must be kept on site at all times.*

68. Comment: **Item E. under subpart 1.3 needs corrected to list July 21, 2004 as the correct date.**

Response: This correction has been made in the final permit.

69. Comment: **The NOI form does not contain a space to list both the legal and official names for a facility. As such, this should not be required under paragraph A. of section 2.3.1 (Content of the NOI).**

Response: The final permit has been changed to only require the legal name of the permittee. Paragraph A. of section 2.3.1 now reads:

- A. The legal name of the permittee, the address or description of location of the CAFO, the name of the county in which the operation is located, site latitude and longitude;*

70. Comment: **The description of included CAFOs given in subpart 3.1 needs to be removed from this subpart, since it doesn't include all possible covered facilities.**

Response: This recommended change was made. Subpart 3.1 now reads, “*All CAFOs described in subpart 1.3 above, must develop, submit for TDA-approval, implement and keep on site a site-specific nutrient management plan (NMP) that...*”

71. Comment: The types of process wastewater provided in subpart 4.1 do not need described as a description of wastewater is already provided.

Response: The examples of process wastewater provided in this subpart were removed from the final permit. This subpart now reads as follows:

All wastewater discharges from a CAFO production area to waters of the State of Tennessee are prohibited unless the discharge results from rainfall events exceeding the 25-year, 24-hour storm for existing CAFOs or new dairy or cattle CAFOs; or rainfall events that exceed the 100-year, 24-hour storm for new swine or poultry CAFOs. Permitted facilities must be properly designed, constructed, maintained, and operated to contain all process wastewater resulting from the operation of the CAFO.

72. Comment: Section 4.5.3. needs clarified to state that the discharge monitoring does not apply to runoff classified as agricultural stormwater.

Response: Section 4.5.3. was clarified based on this suggestion and now reads as follows:

In the event of a discharge from the wastewater retention structure or non-agricultural stormwater discharge from a land application site, additional monitoring requirements and conditions include:

73. Comment: Section 4.7.2. needs clarified to remove the reference to monitoring results. Results can't be conducted according to certain requirements, monitoring procedures can.

Response: Section 4.7.2. was clarified based on this suggestion and now reads as follows:

Monitoring must be conducted according to test procedures specified in TDEC Rule 1200-4-5-.07.

74. Comment: NRCS Conservation Practice Standard 590 is going to be revised. Until it is finalized nutrient management recommendations should be based on a different established resource.

Response: All references to NRCS Conservation Practice Standard 590 were replaced to reference “as recommended by the University of Tennessee Extension.”

75. Comment: TDEC Rules no longer refer to receiving waters as “high quality streams.” As such, these references should be replaced with current verbiage.

Response: All references to “high quality streams” were replaced with “exceptional Tennessee waters.”

Determination

In conclusion, the comments included in this notice of determination document were compiled based on their relevance to the permit content, intent and interpretation of this permit, rather than implementation of the permit conditions (e.g. penalty evaluations, appropriateness of various enforcement measures, development of TMDLs, etc.). Those questions or comments that became a moot point as a result of the changes made in the final permit were not included in this document.

The division's decision on this matter is to issue the General State Operating Permit for Class II Concentrated Animal Feeding Operations (CAFOs), Permit No. SOPCD0000.

DATE: 10/29/2010



Vojin Janjić
Manager, Permit Section