

**Tennessee Department of Environment and Conservation (TDEC)
Division of Water Resources (DWR)
William Snodgrass-Tennessee Tower
312 Rosa L. Parks Avenue
NASHVILLE TN 37243**

Permit Issuance Rationale
Including
Record of Comments and Responses
(Notice of Determination)

**General State Operating Permits for
Concentrated Animal Feeding Operations (CAFOs)**

Permit Nos. SOPC00000 and SOPCE0000

July 30, 2015

Administrative Record

This permit rationale sets forth the Division of Water Resources' (division's) basis for permit conditions to be applied statewide for the reissuance of the General State Operating Permit for Concentrated Animal Feeding Operations (CAFOs), permit number SOPC00000; and for the issuance of permit number SOPCE0000. These CAFO General State Operating Permits (SOP) are intended to authorize the operation of CAFOs that do not discharge and that are not designed, constructed, operated or maintained such that a discharge could occur.

The SOPC00000 general permit is for dry litter poultry operations that land apply their litter on site. It also covers swine operations that utilize under-barn manure storage structures. The SOPCE0000 general permit is specific to poultry operations which export all of their litter to 3rd party recipients.

On January 26, 2015, the division published Public Notice Nos. MMXV-002 and NOPH15-002. These public notices announced our intent to reissue, and issue, these two respective General State Operating Permits. Copies of the draft permits were made available in electronic format on the division's web site at <http://www.tn.gov/environment/ppo/>. On March 4, 2015, a public hearing was held at the William R. Snodgrass – Tennessee Tower, 312 Rosa L. Parks Avenue, Nashville, TN 37243. In addition, it was held via video conference at the following Environmental Field Offices:

Eastern Time Zone

EFO	Location	Phone No.
Chattanooga	1301 Riverfront Parkway, Suite 206	(423) 634-5745
Johnson City	2305 Silverdale Road	(423) 854-5400
Knoxville	3711 Middlebrook Pike	(865) 594-6035

Central Time Zone

EFO	Location	Phone No.
Nashville	711 R.S. Gass Blvd	(615) 687-7000
Jackson	1625 Hollywood Drive	(731) 512-1300
Cookeville	1221 South Willow Avenue	(931) 432-4015
Columbia	1421 Hampshire Pike	(931) 380-3371
Memphis	8383 Wolf Lake Drive, Bartlett	(901) 371-3000

The division originally set the deadline for any comments to be received by March 18, 2015. However, the comment period was extended through March 31, 2015, due to several requests for an extension. The public comments we received are summarized below, along with the division's responses.

Comments received and responses

- 1. Comment:** **The division received multiple comments requesting that all CAFOs be required to obtain individual permits (not general permits) with a public notice and comment period included for each proposed operation.**

Response: General permits are intended for operations that are substantially similar to the extent that a single set of permit conditions ensures compliance with state rule. Only facilities that do not discharge and that are not designed, constructed, operated or maintained such that a discharge could occur are eligible for coverage under SOPC00000 or SOPCE0000. The division's permits are specific to the protection of water quality. This current process is part of the public notice for all facilities that meet the requirements for coverage under either of these two general permits. All applications received by the division are available to the public on the division's dataviewer: [Page 34001 - WPC Permits in TN e-TDEC](#).

If an application is received that does not meet the requirements for general permit coverage, the division will require that operation to obtain coverage under an individual permit. The individual permit will include a public notice and comment period.

- 2. Comment:** **Each operation should have to hold a community meeting with neighbors.**

Response: The division only has the regulatory authority to establish operating terms and conditions for wastewater treatment and disposal activities and to seek comment regarding those conditions and their potential impact on water quality. This regulatory process does not prevent neighbors from coordinating directly with operation owners and developers to discuss community concerns.

- 3. Comment:** **The 3rd Party recipients of manure/litter should have their own Nutrient Management Plan. There should also be a licensing program for manure haulers/handlers.**

Response: The current recipients of litter who use the product as fertilizer on their farms are required to sign a 3rd party recipient agreement that states they will adhere to certain best management practices. The permitted facility must then keep this agreement on file for five years. The division does not currently have the authority to require manure recipients to develop a Nutrient Management Plan. The Tennessee Water Quality Control Act regulates wastewater treatment and discharge, but not fertilizer product transport and application.

4. Comment: There needs to be better enforcement. One visit every five years is not sufficient.

Response: This minimum inspection frequency goal of at least once every five years was based on the level of risk to water quality posed by dry litter poultry facilities. Once per five years is a minimum number and a facility can be visited more frequently. In addition, the division responds to any complaints independent of routine compliance inspections.

5. Comment: Verification of application data and farm topography should be essential.

Response: Each Nutrient Management Plan is reviewed thoroughly and additional information is requested of applicants on a regular basis. The review of the application and Nutrient Management Plan are also aided by independent online resources. Most preparers of Nutrient Management Plans are certified Technical Service Providers (TSP) through the Natural Resources Conservation Service. More information can be found at the following link: [Technical Service Providers | NRCS](#). The TSP as well as the facility owner are both required to sign the application attesting to the accuracy of the information. The Nutrient Management Plan is also used by the local division representative when the facility is inspected to ensure proper operation.

6. Comment: There should be a public hearing for each individual CAFO permit application to provide awareness to the public, and to let them voice their concerns.

Response: While there currently is no individual public hearing requirement for a CAFO covered under a general permit, there is a public hearing held for the issuance/renewal of the general permit itself. That is the reason for this current comment period. A public hearing was held on March 4th to discuss these two general permits.

All applications received by the division are available to the public on the division's dataviewer: [Page 34001 - WPC Permits in TN e-TDEC](#). Division rules are specific to protecting water quality. If operations can demonstrate that they do not discharge and that they are not designed, constructed, operated or maintained such that a discharge could occur, they are eligible to apply for coverage under the appropriate general permit. The hearing provided the opportunity to comment on the general permit terms and conditions. Operations meeting the qualifications for general permit coverage will have to abide by these terms and conditions.

Simply applying for coverage under a general permit does not entitle the applicant to proceed as if covered. A thorough evaluation is conducted upon receipt of the application to determine if the proposed activity is eligible for permit coverage. Facilities that are not eligible for coverage under a general permit are required to seek coverage under an individual permit. There is a public notice and comment period for each proposed individual permit.

- 7. Comment: Recommend that those who apply litter/manure, either for themselves or as a commercial enterprise, be required to properly maintain and calibrate their equipment on a yearly basis. This is standard in Alabama (Alabama Certified Animal Waste Vendor Program).**

Response: The Tennessee Water Quality Control Act regulates wastewater treatment and discharge through permitting, but does not give the division authority to regulate fertilizer commodity transport and application. Land application equipment maintenance and calibration is required of a permitted facility utilizing land under their ownership or operational control (Rule 0400-40-05-.14 (10) 9.).

- 8. Comment: Any chemicals used during facility wash-down should be disclosed so that surrounding waters can be tested for that specific chemical.**

Response: These two general permits do not authorize any type of discharge to waters. Chemicals used during wash-down are not allowed to enter waters of the state in any capacity. Furthermore, chemicals are not allowed to be disposed of in any waste stream (Rule 0400-40-05-.14 (10) 6.).

- 9. Comment: The definition of “farm” should be amended; and, an environmental impact study should be mandatory before a permit is issued to a CAFO.**

Response: The division does not have the authority to require any additional information beyond what is required to obtain coverage under a general permit (Rule 0400-40-04-.14 (6) and 0400-40-05-.05).

- 10. Comment: Would the state be able to do a review of our land mass, waterways, and population areas; and make a map showing where the safest places for such industries to be allowed, and label the spots where they would not be allowed?**

Response: These permits do not authorize a discharge. For new CAFOs that are located adjacent to exceptional Tennessee waters and outstanding national resource waters, a 60-foot natural riparian buffer must be maintained between the stream and land application area (Rule 0400-40-05-.14 (10) 7.). The division does not have authority to regulate property use. It regulates activities that have the potential to add pollutants to public waters.

- 11. Comment: An individual permit is needed for the following reasons:**

- **Every farm is so unique and different that a general permit can never cover everything**

- **Even a no discharge system has waste products during cleanout that are potential hazards**
- **Although a nutrient management plan is required for the CAFO farm, there are no such regulations on the manure applications once it leaves the farm gate**
- **Managers of CAFOs vary greatly in how clean they keep their operation, and there is no training (like there is for pesticides) required beforehand**
- **Places where poultry CAFOs have been in the past have had dramatic negative consequences**
- **Specific concerns are: water pollution from manure running off of the fields and into branches and streams; the large quantities of manure (600 tons per year per house) and its storage; runoff during cleanout; antibiotic use that affects a human's resistance to its effects; the amount of clean water used up daily; the odor that travels over property lines and bothers neighbors; the damage done to public roads; the increase in flies; lower property values; the reluctance of other industries to locate nearby; the loss of jobs as businesses move away; and the difficulty for the farmers to pay off the buildings due to upgrading requirements**

Response: Permit terms and conditions for facilities covered under a general permit are the same, but handling of permit violations, complaint investigations and other enforcement activities are not different from the enforcement applied to individual permits.

Permit terms and conditions are developed in consideration of proper facility operation. Production areas are very similar in these facilities. Sites are constructed similarly, and must meet minimum NRCS standards for litter storage sheds, swine barns, and other relevant waste storage structures.

No discharge is authorized under these permits during any operating conditions.

The current recipients of litter who use the product as fertilizer on their farms are required to sign a 3rd party recipient agreement that states they will adhere to certain best management practices. The permitted facility must then keep this agreement on file for five years. The division does not currently have the authority to require manure recipients to develop a Nutrient Management Plan. The Tennessee Water Quality Control Act regulates wastewater treatment and discharge, but not fertilizer product transport and application.

There are no current rules to address the topic of training. However, it is recommended in the general permit.

CAFOs that land apply their waste have site specific Nutrient Management Plans in place to ensure that litter/manure is applied according to appropriate agronomic rates. There are also required buffers and setbacks during land application according to state rules (Rule 0400-40-05-.14 (7.)).

Comments regarding antibiotic use, clean water use, odor, damage done to public roads, the increase in flies, lower property values, local industry, job loss, and the difficulty for the farmers to pay off the buildings due to upgrading requirements are beyond the scope of the division's permitting authority.

- 12. Comment:** **Of particular concern is the NE section of Macon County, where a unique set of circumstances exist. This is the only place in TN where water flows north into the Barren river, and on into the Green River. There are more springs here, and two of the four creeks are TDEC classified as pristine. These four spring fed creeks run consistently all summer with cool, crystal clear water. There are lots of caves and the well water is terrific, which is why Nestle's water has located here. The two proposed CAFOs near Red Boiling Springs will produce 1200 tons poultry litter every year for the life of the CAFO. The land here is very hilly, and this manure will end up in our water. The nearby town of Hermitage Springs smells awful much of the time. Red Boiling Springs has a history of great water and tourism, and these are threatened because of the permitting being general. Individual permits would at the very least inform the public about what is planned, and allow for public comment. Because CAFOs affect everyone, but profit very few: it is in everyone's best interest to have individual permits, not general permits.**

Response: These general permits are for substantially similar operations. The division's permits are specific to the protection of water quality in all hydrogeological settings within the state. This current process is part of the public notice for all facilities that meet the requirements for coverage under either of these two general permits. All applications received by the division are available to the public on the division's dataviewer: [Page 34001 - WPC Permits in TN e-TDEC](#).

If an application is received that does not meet the requirements for general permit coverage, the division will require that operation to obtain coverage under an individual permit. The individual permit process will include a public notice and comment period.

- 13. Comment:** **There were several comments naming two specific CAFOs in the area that have already been permitted.**

Response: These two CAFOs that have been mentioned have submitted all required materials to obtain permit coverage. Notices of Coverage have been issued to both of these facilities.

- 14. Comment:** **The term "etc" is not acceptable language for a permit. The term is all inclusive and thus impossible to know if one was in compliance prior to receiving approval to operate under the General Permit. Similar language is found in 3.2(b) of the permit.**

See page 3 of 23, 1.4 Authorization: "This permit does not authorize the discharge of process wastewater and/or pollutants to waters of the State of Tennessee. 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 (TDA), on the effective date of coverage under this General Permit.”

Response: The term etc. was used to show similar types of practices.

15. Comment: Construction Permits for AFO/CAFOs: the agency website does not have clear instructions on whether or not a new AFO/CAFO requires a construction permit. The General Permit is an operating permit and thus does not seem to be the appropriate method to approve construction.

On page 7 of 23, 2.1.2 New Site, it states “An operator of a new source must seek to obtain coverage under a permit at least 180 days prior to the time that the CAFO commences operation.” No mention is made as to whether or not the AFO/CAFO would require a construction permit prior to commencing construction.

On page 9 of 23, 3.2 item (b) states: “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.” Again, this language implies the facility must be constructed prior to being issued a Notice of Coverage under the Operating General Permit.

Response: These two CAFO General Permits are both operating permits. Additionally, coverage under the NPDES General Permit for Construction Stormwater is needed for facilities that will be disturbing one acre or more during construction.

Section 3.2 item (b) has been re-worded to address these comments.

16. Comment: Engineering Plans and Specifications: On page 7 of 23, 2.3.1 Contents of NOI does not include the submittal of engineering plans and specifications.

On page 8 of 23, 3.1 Nutrient Management Plan contents, item (b) states “ensures adequate storage of manure, litter, and process wastewater including procedures to ensure proper operation and maintenance of the storage facilities.” Neither the agency nor the public can determine if there is sufficient storage capacity without evaluating the engineering plans and specifications of each manure storage structure and its appurtenances.

On page 9 of 23, 4.1.1 states “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.)” The General Permit does not list the mechanism in which to prove that the facility is “properly designed and constructed.” The term “properly” implies there are minimum requirements for the design and the construction.

Typically in other states, the design and construction of waste storage facilities is evaluated and approved by the applicant submitting engineering plans and

specifications for agency review and determination of completeness or deficiency. The submittal of such information is also important for the public to have access to the design to perform their own evaluation of the proposed facility and its waste management system.

On page 12 of 23, 4.7 states:

“In order for a CAFO with a liquid waste management system to be eligible for coverage under this permit, the liquid waste management system must be designed to exclude all stormwater and must not contain any design allowances for a discharge from the liquid waste management system.

No CAFO liquid waste management system shall be constructed, modified, repaired, or placed into operation after April 13, 2006 unless it is designed, constructed, operated, and maintained in accordance with final design plans and specifications... per TDEC Rule 0400-40-05-.14.”

TDEC Rule 0400-40-05-.14 states:

“In addition to the application requirements of paragraph (2) of Rule 0400-40-05-.05, CAFOs shall submit...”

TDEC Rule 0400-40-05-.05 states:

“(2) Applicants shall complete and submit standard application forms supplied by the Commissioner together with such engineering reports, plans and specifications as are required.”

The question remains – are plans and specifications required for the operating permit?

Response: Plans and specifications are required for liquid waste systems that are new or that have changed their operation such that it will affect the amount of manure the waste storage structure will receive. Also, NRCS - Animal Waste Management software is utilized in the Nutrient Management Plan to show the design of the lagoon/waste storage structure. Please see rule 0400-40-05-.14 (14), which gives guidance regarding liquid waste management systems.

17. Comment: Significant Changes and lack of Public Notice. On page 9 of 23, 3.2(d) states: “Permittees must review their NMP annually and whenever there have been significant changes that affect the amount of manure produced, such as the number of animals on site; changes to the land application area; changes in how the manure is handled, stored, transferred, or land applied; or changes to how animal mortalities are handled. The permittee shall submit the changes to the division per subpart 6.6 below. Such changes must be reviewed and approved by the state.”

The wording is awkward, especially “such changes must be reviewed and approved by the state.” The first part of the paragraph implies that significant changes have already occurred. The two sentences of the paragraph are not specific enough to know if the permittee must get approval before the significant changes are made or after. The last sentence implies that the

changes must be approved by the state – thus removing any option that the state may want to deny the changes.

Suggested wording in underline/strikeout:

“Permittees must review their NMP annually and update the plan whenever there have been significant changes that affect the amount of manure produced, such as the number of animals on site; changes to the land application area; changes in how the manure is handled, stored, transferred, or land applied; or changes to how animal mortalities are handled. Prior to implementing any significant changes, ~~the~~ permittee shall submit in writing a description of the changes to the division per subpart 6.6 below. Such changes must be ~~reviewed and~~ approved by the state prior to implementation.”

None of this language with respect to “significant changes” includes notice to the public when many of these “changes” could have negative impacts on neighbors and the surrounding community. The public has a right to notice, public comment, and opportunity for hearing.

Response: Current rules do not include the public notice of Nutrient Management Plan changes for operations covered under a state permit (Rule 0400-40-05-.14 (10) (c) 3.). However, the division does have the ability to deny permit coverage of the changes if they do not meet the minimum nutrient management plan requirements.

There is a public notice requirement for any substantial changes to a Nutrient Management Plan for operations covered under an NPDES permit (Rule 0400-40-05-.14 (10) (c)).

Section 3.2 (d) has been re-worded to incorporate the mentioned suggestions.

18. Comment: Typo. On page 9 of 23, 3.2(b) states “The permittee shall submit the changes to the division per subpart 6.6 below.” On page 18 of 23, Subpart 6.6 states “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 when the alteration or additions to a permitted facility is considered a new source per 0400-40-05-.02(54).” The definition of “new source” is definition number 55, not item 54.

Response: This item has been updated.

19. Comment: Allowing versus Minimizing and Preventing. On page 10 of 23, 4.1 states “Discharge of agricultural stormwater from land application areas are allowed so long as they meet the following requirements:”

Agricultural stormwater discharge should be prohibited unless it occurs under the specific conditions as set forth in the federal Clean Water Act. Tennessee should be careful in their wording so as to not give the impression that a discharge is okay – the language should convey an emphasis on prevention and minimization of discharge.

Response: These general permits do not allow for a discharge of any kind. Agricultural stormwater discharges are only exempt if they meet the requirements set forth in the Clean Water Act to qualify as an agricultural stormwater discharge.

The mentioned permit language in section 4.1 has been re-worded.

20. Comment: Significant kill or die-off. On page 11 of 23, 4.6.1(d) states “the operator shall notify the division in the event of any significant fish, wildlife, or migratory bird/endangered species kill or die-off on or near retention ponds or in fields where waste has been applied.”

This paragraph is poorly constructed – is the state trying to equate a fish kill with an endangered species die-off?

What is considered to be a significant kill or die-off for each of the categories?

Are fish found in fields and near retention ponds?

What if the fish kill was due to agricultural stormwater runoff or a retention pond overflow?

Is this paragraph the division’s attempt to protect endangered species?

How many CAFOs have reported a kill or die-off to the division while operating under the General Permit?

Response: The division is not trying to equate any of these scenarios. This specifies that the operator is to make the division aware if any of these situations occur.

The qualifier “significant” has been removed from section 4.6.1 (d).

The agricultural stormwater exemption only applies to the specific circumstances mentioned in the Clean Water Act. If a retention pond overflows and affects water quality (with or without a fish kill being involved), the division has the right to issue a Notice of Violation and pursue enforcement against the facility. If a fish kill was also involved, then there would be additional issues to address. The Tennessee Wildlife Resources Agency (TWRA) would be included in the response to the incident.

According to the division’s available records, there have not been any instances of CAFO facilities covered under the SOPC00000 general permit which have reported a kill or die-off.

21. Comment: Allowable discharge to groundwater. On page 13, of 23, 4.7 states “demonstrate that the hydraulic connection does not exceed a maximum allowable specific discharge of 0.0028 ft/day (1 x 10⁻⁶cm/sec). Converting to gallons per acre day, the specific discharge equates to 923 gallons per acre per day as follows:

$$1 \times 10^{-6} \text{ cm/sec} \times (3600 \text{ sec/hr}) \times (24 \text{ hr/day}) \times (1 \text{ inch}/2.54 \text{ cm}) \times (1 \text{ gal}/231 \text{ in}^3) \\ \times (144 \text{ in}^2/\text{ft}^2) \times (43,560 \text{ ft}^2/\text{acre}) = 923 \text{ gallons/acre/day}$$

A one acre earthen retention pond would “seep” 337,140 gallons of wastewater per year as follows:

1 acre x 923 gal/acre/day x 365days/yr = 337,140 gallons/year

If the concentration of nitrogen was 500 ppm, the allowable seepage would result in 1,400 pounds of nitrogen entering the subsurface every year. After a 20 year design life, that adds up to 28,106 pounds of nitrogen into the subsurface.

How many CAFOs with retention ponds are operating under this General Permit? What is the average size of existing retention ponds in surface acres? Has the agency determined the volume of liquid manure wastewater that has been allowed to enter the subsurface and hence the shallow groundwater? How many existing CAFOs with retention ponds have monitoring wells?

Response: There are no CAFOs with retention ponds operating under these two general permits. There are some swine facilities with under-barn storage structures covered under the SOPC00000 General Permit. However, these storage structures are designed and constructed to meet or exceed NRCS standards and are not exposed to the environment (Rule 0400-40-05-.14 (14)). There are no monitoring wells in place at these facilities.

22. Comment: Transfer of over 100 tons. On page 13 of 23, 4.8 states “for operations that transfer more than 100 tons of manure, litter or process wastewater per year to a third party...”

How will the operator weigh the manure, litter or process wastewater to ascertain when they have “sold or given away” more than 100 tons?

**Since swine facilities generally have liquid manure systems, it would make more sense to place a restriction in units of volume where 200,000 lbs of liquid manure would be about 24,000 gallons.
(200,000 lbs) / (8.34 lbs/gal) = 23,981 gallons**

Since poultry facilities generally have a dry manure system, yet probably don’t have a weigh scale on the property, so the amount of manure should be based on cubic feet removed or exported.

Response: Gallons and cubic feet have been added to the SOPC00000 General Permit based on this recommendation. Also, cubic feet have been added to the SOPCE0000 General Permit.

23. Comment: Lack of groundwater monitoring. The General Permit does not seem to require groundwater monitoring, especially for liquid waste management systems. There are surely situations in Tennessee where there is shallow groundwater and nearby users of that shallow groundwater for drinking water, private or public, and those resources should be protected and monitored.

One solution would be to prohibit the use of compacted soil or clay liners where shallow groundwater is less than 50 feet below land surface. The permit should require concrete or plastic liners and leak detection systems for CAFOs located in areas with shallow groundwater.

Liquid manure systems that use compacted soil or clay liners pose an ongoing hazard to groundwater as those systems are designed to leak. Groundwater monitoring should be mandatory for all soil and clay lines impoundments, including but not limited to baseline sampling, minimum of one upgradient and two downgradient wells, quarterly groundwater monitoring for pH, Total Dissolved Solids (TDS), Nitrates-N (NO₃), Total Kjeldahl Nitrogen (TKN), Ammonia-N, and fecal coliform.

Response: The SOPC00000 general permit is for dry litter poultry operations that land apply their litter on site. It also covers swine operations that utilize under-barn manure storage structures. The SOPCE0000 general permit is specific to poultry operations which export all of their litter to 3rd party recipients.

The only facilities with liquid waste covered under either of these two general permits are swine facilities with under-barn waste storage structures. However, these storage structures are designed and constructed to meet or exceed NRCS standards and are not exposed to the environment (Rule 0400-40-05-.14 (14)).

24. Comment: NRCS Standard 313 Waste Storage Facility. The Tennessee version of this NRCS conservation practice standard was last updated in May 2003, which means the contents of the standard are basically twelve years old.

When is Tennessee going to ask NRCS to update the Standard 313?

The standard implies that CAFOs can be constructed in the flood plain – is that allowed under current CAFO regulations in Tennessee?

The setbacks on page 2 of the Standard are extremely minimal (e.g. setback to public use area or a residence is only 300 feet). It also claims “for operations with existing waste storage facilities that are expanding, these requirements do not apply.”

How close are existing CAFOs (operating under this General Permit) to residences, public use areas, potable wells, and streams? Has that distance been sufficient to “protect aesthetic values” and minimize odors as stated in the NRCS Standard 313?

Response: The division considers NRCS Standard 313 to be appropriate.

There are currently no division regulations to address whether or not a CAFO can be constructed in a floodplain.

There are currently no division regulations to address where buildings can be placed. However, there are regulations requiring setbacks for land application areas (Rule

0400-40-05-.14(10)7.). Please see the following link to the division's rules: <http://share.tn.gov/sos/rules/0400/0400-40/0400-40-05.20140218.pdf>.

Protection of aesthetic values and regulation of odor are not within the authority of the division.

25. Comment: Closure of Retention Ponds. The General Permit does not mention the need for determining if groundwater has been contaminated and requiring a provision for pollution abatement. Is there another mechanism to trigger pollution abatement besides the Closure Plan? What happens if there is groundwater contamination, but no one knows because there is no required groundwater monitoring?

Response: There currently is no requirement for groundwater monitoring for facilities under either of these proposed general permits. Any retention ponds covered under the SOPC00000 General Permit will be part of under-barn waste storage structures. These storage structures are designed and constructed to meet or exceed NRCS standards and are not exposed to the environment (Rule 0400-40-05-.14 (14)).

26. Comment: Transfer of manure to third parties. The recordkeeping and annual report section of the General Permit does not appear to require the name(s) of the third parties that receive manure and manure wastewater from CAFOs. Transfer of manure should be monitored, especially when a significant amount is transferred; not only for the amount, but whether or not the recipient is qualified to properly land apply the waste. CAFO waste that is land applied by persons other than the permittee means some landowners will not have the benefit of public notice and opportunity for comment and hearing and yet will be subjected to the negative aspects of manure disposal.

Response: If the facility is a large CAFO, or if they transfer at least 100 tons of manure, litter, or process wastewater; the facility is required to obtain a signed agreement from the recipient of the manure, litter, or process wastewater (Rule 0400-40-05-.14 (11)(b)). The facility must also maintain transfer records on site.

The current recipients of litter who use the product as fertilizer on their farms are required to sign a 3rd party recipient agreement that states they will adhere to certain best management practices. The permitted facility must then keep this agreement on file for five years. The division does not currently have the authority to require manure recipients to develop a Nutrient Management Plan. The Tennessee Water Quality Control Act regulates wastewater treatment and discharge, but not fertilizer product transport and application.

27. Comment: Opportunity for public notice, comment, and appeal for NOIs. When a large CAFO submits an NOI, does the division require public notice? What are the options for a public hearing or adjudicatory hearing on the proposed NOI?

Response: There currently is no public notice requirement for general permits, only for individual permits. The permit terms and conditions that will apply to facilities covered under the general permit are subject to public review and comment through

this public notice action. If a large CAFO is seeking coverage under an individual permit, then a public notice and comment period will be required. However, if a large CAFO qualifies for coverage under a general state permit, then there currently is no public notice requirement.

Every application package the division receives is available to the public on the Division of Water Resources Dataviewer: [Page 34001 - WPC Permits in TN e-TDEC](#).

28. Comment: **Surface water monitoring. The General Permit does not seem to have a provision to require surface water monitoring for those facilities with retention ponds that are located close to surface water, or for land application areas that have waterways; field tile discharge, or highly erodible lands and steep slopes. Wouldn't it be prudent to require baseline surface water sampling to compare to surface water quality after the facility is in operation? If millions of gallons of manure are land applied in the immediate watershed of a high quality stream – how will the division insure that degradation will not occur? Should CAFO manure be land applied in the immediate watershed of an impaired stream?**

Response: The division does currently have stream assessment data for many streams across the state. The division does not have the resources to plan and implement surface water quality sampling sufficient to statistically derive defensible baseline values as functions of all variables impacting surface water quality. However, the division has already derived macro-invertebrate index scores and nutrient concentration levels for reference streams in each of Tennessee's eco-regions. These values are currently being used by the division to assess water quality across the state. There is information on Exceptional TN Waters and Outstanding Natural Resource Waters at the following link: [Exceptional TN Streams](#). Information on the Tennessee Watershed cycle relevant to stream assessments and the TMDL program can be found at the following link: <http://tn.gov/environment/article/watershed-management-cycle>.

If a permitted operation meets and follows the requirements listed in Rule 0400-40-05-.14 regarding land application, then water quality should not be degraded. There is also a requirement (see Rule 0400-40-05-.14 (7.)) for a minimum 60-foot natural riparian buffer between land application areas and exceptional TN waters or outstanding natural resource waters.

29. Comment: **Open wastewater containment systems. In the response to comments dated May 28, 2012, the division wrote "this permit does not authorize operations with open wastewater containment structures, such as lagoons." On page 12 of 23, 4.7 item (a) states:**

"Any new or additional confinement buildings, waste/wastewater handling system, waste/wastewater transport structures, waste/wastewater treatment structures, settling basins, lagoons, holding ponds, sumps or pits, and other agricultural waste containment/treatment structures constructed after April 13, 2006 shall be located in accordance with NRCS Conservation Practice Standard 313."

Item (b) states:

“A subsurface investigation for earthen holding pond, pit, sump, treatment lagoon, or other earthen storage/containment structure suitability and liner requirements shall be a component of the system design.”

What has changed between the original General Permit and this renewal version? Does the division still concur that “open wastewater containment structures are not covered by this General Permit?”

Response: Open wastewater containment structures are not covered by either of these two proposed General Permits.

30. Comment: Where is the Rationale statement for the proposed renewal of this General Permit?

Response: A handout with pertinent information about each of the two permits was given out at the public hearing. A power point presentation regarding the proposed permits was also presented.

31. Comment: Why does the support of business outrank the protection of scenic beauty, clean water, clean air, and irreplaceable natural ecosystems? I do not believe it should, and TDEC has a responsibility to take care of the natural environment.

Response: The CAFO regulations (Rule 0400-40-05-.14) are specific to the protection of water quality. These current proposed general permits are for operations that are not authorized to have any kind of discharge to waters. Operations must submit all required information (Rule 0400-40-05-.14 (6) and 0400-40-04-.05) to be eligible for permit coverage.

32. Comment: Please consider future restrictions to phase out this kind of unsustainable and inhumane business in our state.

Response: The CAFO regulations (Rule 0400-40-05-.14) are specific to the protection of water quality.

33. Comment: A permit should only be given if the proposed industrial farm has submitted a plan showing that the industrial farm is able to follow the best practices so that the environment will in no way be compromised, and that the industrial farm will be a good neighbor to the community.

Response: The operation is currently required to develop and submit for state approval a site-specific Nutrient Management Plan. This plan gives detailed information regarding how the facility will operate with respect to protecting water quality.

34. Comment: There are too many factors to consider to be able to give blanket permits allowing factory farms to build anywhere they want.

Response: If an applicant can demonstrate that they meet all of the requirements specified in Rule 0400-40-05-.14, then the division is obligated to grant the facility coverage under the appropriate general permit. General permits are used for those facilities that are substantially similar such that the limits in the permit incorporate the operation of the facilities.

35. Comment: The permit and plan should reflect an assessment of the particular ecosystem within which the operation will be situated. This is because each farm is positioned in a unique relationship to its watershed.

Response: Conditions posed by the general permit are considered to be protective of all ecosystem variations. Each nutrient management plan is site specific to each individual facility. There is also no discharge allowed under either of these general permits.

Information regarding surface water designated uses is available at the following link to Rule 0400-40-04: <http://share.tn.gov/sos/rules/0400/0400-40/0400-40-04.20131216.pdf>.

36. Comment: Farm managers and operators need training to understand their responsibility and best practices for ensuring the health of their animals and food products, safe storage of pesticides and other chemicals; as well as manure disposal.

Response: Rule 0400-40-05-.14 (10) specifies items that must be addressed in the site-specific nutrient management plan. Some of these items that are relevant to this question include: adequate storage of manure, correct agronomic disposal of manure, proper management of mortalities, and proper storage of chemicals. There are no current rules to address the topic of training. However, it is recommended in the general permit.

The division partners with the Department of Agriculture on review and approval of these applications and their nutrient management plans. The Department of Agriculture provides educational resources to farmers regarding these issues.

37. Comment: Requiring that farms raising vast amounts of chickens for meat or eggs be permitted, inspected, and required to properly recycle waste should be an important component of what the state does to protect its citizens and ensure the chickens are treated humanely.

Response: Operations meeting the definition of a CAFO (Rule 0400-40-05-.14 (3)) are required to apply for and obtain permit coverage. Permitted operations are inspected regularly. Permitted operations are required to follow their approved nutrient management plan which specifies how their waste is to be managed. This process encourages the reuse of dry litter as fertilizer.

38. Comment: Please consider each application or reapplication for either permit carefully to insure that location of a CAFO, and the acreage committed to its nutrient

management plan will not in any way harm, or impair any of the 10 units of the national park system in Tennessee.

Response: The CAFO regulations (Rule 0400-40-05-.14) are specific to the protection of water quality. These current proposed general permits are for operations that are not authorized to have any kind of discharge to waters. Operations must submit all required information (Rule 0400-40-05-.14 (6) and 0400-40-04-.05) to be eligible for permit coverage.

Nutrient Management Plans must provide field specific information regarding land application of manure. This includes a field specific assessment of any land where manure is going to be applied.

39. Comment: An appropriate public notice comment period for new and reapplying CAFO applications is 60-90 days.

Response: Rules allow for a 30 day comment period for individual permits, and for the respective general permit itself.

40. Comment: The National Parks Conservation Association requested to be made aware of permit applications for CAFOs and AFOs in Tennessee, by mail to their Southeast Regional Office.

Response: There is no permitting requirement for AFOs, only for CAFOs. All CAFO application materials are available to the public on the division's Dataviewer: [Page 34001 - WPC Permits in TN e-TDEC](#).

41. Comment: There should be a site specific assessment of each location that takes into account geology, hydrology and other location specific factors.

Response: The rules require setbacks from sinkholes, down-gradient surface waters, open tile line intake structures, agricultural well heads, or other conduits to surface waters, which necessitates site assessments for these individual features. Please see Rule 0400-40-05-.14(10)7, which is located at the following link: <http://share.tn.gov/sos/rules/0400/0400-40/0400-40-05.20140218.pdf>.

Determination

The division's decision on this matter is to re-issue the SOPC00000 General Permit for Concentrated Animal Feeding Operations, with all changes mentioned during the above responses incorporated.

The division has also decided to issue the SOPCE0000 General Permit, with all changes mentioned during the above responses incorporated.