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States' Nutrient Management Plans Statutes & Regulations:

Tennessee



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States' Nutrient Management Plans Statutes & Regulations:
Tennessee

TN Code §§ 69-3-102; 103(2), (39); 107; 108; 141
TN Comp Rules and Regs 0400-40-05-.02(1), (3), (5), (8), (22),
(65)

TN Comp Rules and Regs 0400-40-05-.14(9), (10)

*The statutes and Constitution are current through the 2018 regular and special legislative sessions.
The statutes are subject to changes by the Tennessee Office of Legal Services.*

TN Code §§ 69-3-102. Declaration of policy and purpose.

(a) Recognizing that the waters of Tennessee are the property of the state and are held in public trust for the use of the people of the state, it is declared to be the public policy of Tennessee that the people of Tennessee, as beneficiaries of this trust, have a right to unpolluted waters. In the exercise of its public trust over the waters of the state, the government of Tennessee has an obligation to take all prudent steps to secure, protect, and preserve this right.

(b) It is further declared that the purpose of this part is to abate existing pollution of the waters of Tennessee, to reclaim polluted waters, to prevent the future pollution of the waters, and to plan for the future use of the waters so that the water resources of Tennessee might be used and enjoyed to the fullest extent consistent with the maintenance of unpolluted waters.

(c) Moreover, an additional purpose of this part is to enable the state to qualify for full participation in the national pollutant discharge elimination system (NPDES) established under § 402 of the Federal Water Pollution Control Act, Public Law 92-500, codified in 33 U.S.C. § 1342.

(d) Additionally, it is intended that all procedures in this part shall be in conformity with the Uniform Administrative Procedures Act, compiled in title 4, chapter 5.

TN Code §§ 69-3-103. Part definitions. [See contingent amendment to subdivisions (4) and (19) and the Compiler's Notes.]

As used in this part, unless the context otherwise requires:



(1) "Administrator" means the administrator, or head by whatever name, of the United States environmental protection agency;

(2) "Animal feeding operation" means a lot or facility, other than an aquatic animal production facility, where the following conditions are met:

(A) Animals, other than aquatic animals, have been, are, or will be stabled or confined and fed or maintained for a total of forty-five (45) days or more in any twelve-month period; and

(B) Crops, vegetation, forage growth, or post-harvest residues are not sustained in the normal growing season over any portion of the lot or facility;

(3) "Areawide waste treatment management plan" means a plan that has been approved by the administrator pursuant to § 208 of the Federal Water Pollution Control Act, Public Law 92-500, codified in 33 U.S.C. § 1288;

[Current version. See second version for contingent amendment and Compiler's Notes.]

(4) "Board" means the board of water quality, oil and gas, created in § 69-3-104;

[Contingent amendment. See the Compiler's Notes.]

(4) "Board" means the Tennessee board of energy and natural resources, created by § 69-3-104;

(5) "Boat" means any vessel or watercraft moved by oars, paddles, sails or other power mechanism, inboard or outboard, or any vessel or structure floating upon the water whether or not capable of self-locomotion, including, but not limited to, houseboats, barges, docks, and similar floating objects;

(6) "Commissioner" means the commissioner of environment and conservation or the commissioner's duly authorized representative and, in the event of the commissioner's absence or a vacancy in the office of commissioner, the deputy commissioner;

(7) "Construction" means any placement, assembly, or installation of facilities or equipment, including contractual obligations to purchase such facilities or equipment, at the premises where such equipment will be used, including preparation work at such premises;

(8) "Department" means the department of environment and conservation;

(9) "Director" means the director of the division of water management of the department;



(10) "Discharge of a pollutant," "discharge of pollutants," and "discharge," when used without qualification, each refer to the addition of pollutants to waters from a source;

(11) "Division" means the division of water management;

(12) "Effluent limitation" means any restriction, established by the board or the commissioner, on quantities, rates and concentrations of chemical, physical, biological, and other constituents that are discharged into waters or adjacent to waters;

(13) "Forestry best management practices" means those land and water resource conservation measures that prevent, limit, or eliminate water pollution for forest resource management purposes, as provided in rules promulgated in this part in accordance with § 11-4-301(d)(18). Until those rules are effective, "forestry best management practices" will be those that have been developed by the division of forestry of the department of agriculture. The commissioner of agriculture shall specifically identify these interim forestry best management practices prior to September 1, 2000;

(14) "Industrial user" means those industries identified in the standard industrial classification manual, bureau of the budget, 1967, as amended and supplemented, under the category "Division D -- Manufacturing" and such other classes of significant waste producers as the board or commissioner deems appropriate;

(15) "Industrial wastes" means any liquid, solid, or gaseous substance, or combination thereof, or form of energy including heat, resulting from any process of industry, manufacture, trade, or business or from the development of any natural resource;

(16) "Liquid waste management system" means a waste management system that collects, stores, or land applies manure in a liquid, flowable form;

(17) "Local administrative officer" means the chief administrative officer of a pretreatment agency that has adopted and implemented an approved pretreatment program pursuant to this part and 33 U.S.C. § 1251 et seq. and 40 CFR 403.1 et seq.;

(18) "Local hearing authority" means the administrative board created pursuant to an approved pretreatment program that is responsible for the administration and enforcement of that program and §§ 69-3-123 -- 69-3-129;

[Current version. See second version for contingent amendment and Compiler's Notes.]



- (19) "Member" means a member of the board of water quality, oil and gas;
[Contingent amendment. See the Compiler's Notes.]
- (19) "Member" means a member of the Tennessee board of energy and natural resources;
- (20) "Municipal separate storm sewer system" means a municipal separate storm sewer system as defined in the Clean Water Act, compiled in 33 U.S.C. § 1251 et seq., and the rules promulgated thereunder;
- (21) "New source" means any source, the construction of which is commenced after the publication of state or federal regulations prescribing a standard of performance applicable to such source;
- (22) "Obligate lotic aquatic organisms" means organisms that require flowing water for all or almost all of the aquatic phase of their life cycles;
- (23) "Operator" as used in the context of silvicultural activities, means any person who conducts or exercises control over any silvicultural activities; provided, however, that the term "operator" does not include an owner if the silvicultural activities are being conducted by an independent contractor;
- (24) "Other wastes" means any and all other substances or forms of energy, with the exception of sewage and industrial wastes, including, but not limited to, decayed wood, sand, garbage, silt, municipal refuse, sawdust, shavings, bark, lime, ashes, offal, oil, hazardous materials, tar, sludge, or other petroleum byproducts, radioactive material, chemicals, heated substances, dredged spoil, solid waste, incinerator residue, sewage sludge, munitions, biological materials, wrecked and discarded equipment, rock, and cellar dirt;
- (25) "Owner" as used in the context of silvicultural activities, means any person or persons that own or lease land on which silvicultural activities occur or own timber on land on which silvicultural activities occur;
- (26) "Owner or operator" means any person who owns, leases, operates, controls, or supervises a source;
- (27) "Person" means any and all persons, including individuals, firms, partnerships, associations, public or private institutions, state and federal agencies, municipalities or political subdivisions, or officers thereof, departments, agencies, or instrumentalities, or public or private corporations or officers thereof, organized or existing under the laws of this or any other state or country;
- (28) "Pollutant" means sewage, industrial wastes, or other wastes;



(29) "Pollution" means such alteration of the physical, chemical, biological, bacteriological, or radiological properties of the waters of this state, including, but not limited to, changes in temperature, taste, color, turbidity, or odor of the waters that will:

(A) Result or will likely result in harm, potential harm or detriment to the public health, safety, or welfare;

(B) Result or will likely result in harm, potential harm or detriment to the health of animals, birds, fish, or aquatic life;

(C) Render or will likely render the waters substantially less useful for domestic, municipal, industrial, agricultural, recreational, or other reasonable uses; or

(D) Leave or likely leave the waters in such condition as to violate any standards of water quality established by the board;

(30) "Pretreatment agency" means the owner of a publicly owned treatment works permitted pursuant to this part that is required by its permit to adopt and enforce an approved pretreatment program that complies with this part and 33 U.S.C. § 1251 et seq. and 40 CFR 403.1 et seq.;

(31) "Pretreatment program" means the rules, regulations, and/or ordinances of a pretreatment agency regulating the discharge and treatment of industrial waste that complies with this part and 33 U.S.C. § 1251 et seq. and 40 CFR 403.1 et seq.;

(32) "Qualified local program" means a municipal separate storm sewer system that has been approved as such by the department pursuant to this part;

(33) "Regional administrator" means the regional administrator of the United States environmental protection agency whose region includes Tennessee, or any person succeeding to the duties of this official;

(34) "Schedules of compliance" means a schedule of remedial measures including an enforceable sequence of actions or operations leading to compliance with an effluent limitation, condition of a permit, other limitation, prohibition, standard, or regulation;

(35) "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;



(36) "Sewerage system" means the conduits, sewers, and all devices and appurtenances by means of which sewage and other waste is collected, pumped, treated, or disposed;

(37) "Silvicultural activities" means those forest management activities associated with the harvesting of timber and including, without limitation, the construction of roads and trails;

(38) "Source" means any activity, operation, construction, building, structure, facility, or installation from which there is or may be the discharge of pollutants;

(39) "Standard of performance" means a standard for the control of the discharge of pollutants that reflects the greatest degree of effluent reduction that the commissioner determines to be achievable through application of the best available demonstrated control technology, processes, operating methods, or other alternatives, including, where practicable, a standard permitting no discharge of pollutants;

(40) "Stop work order" means an order issued by the commissioner of environment and conservation requiring the operator to immediately cease part or all silvicultural activities;

(41) "Stream" means a surface water that is not a wet weather conveyance;

(42) "Toxic effluent limitation" means an effluent limitation on those pollutants or combinations of pollutants, including disease-causing agents, which after discharge and upon exposure, ingestion, inhalation or assimilation into any organism, either directly from the environment or indirectly by ingestion through food chains, will, on the basis of available information, cause death, disease, behavioral abnormalities, cancer, genetic mutations, physiological malfunctions, including malfunctions in reproduction, or physical deformations, in such organisms or their offspring;

(43) "Variance" means an authorization issued to a person by the commissioner that would allow that person to cause a water quality standard to be exceeded for a limited time period without changing the standard;

(44) "Watercourse" means a man-made or natural hydrologic feature with a defined linear channel that discretely conveys flowing water, as opposed to sheet-flow;

(45) "Waters" means any and all water, public or private, on or beneath the surface of the ground, that are contained within, flow through, or border upon Tennessee or any portion thereof, except those bodies of water confined to and retained within the limits of private property in single ownership



that do not combine or effect a junction with natural surface or underground waters; and

(46) "Wet weather conveyance" means, notwithstanding any other law or rule to the contrary, man-made or natural watercourses, including natural watercourses that have been modified by channelization:

- (A) That flow only in direct response to precipitation runoff in their immediate locality;
- (B) Whose channels are at all times above the groundwater table;
- (C) That are not suitable for drinking water supplies; and
- (D) In which hydrological and biological analyses indicate that, under normal weather conditions, due to naturally occurring ephemeral or low flow there is not sufficient water to support fish, or multiple populations of obligate lotic aquatic organisms whose life cycle includes an aquatic phase of at least two (2) months.

TN Code §§ 69-3-107. Duties and authority of the commissioner.

In addition to any power, duty, or responsibility given to the commissioner under this part, the commissioner has the power, duty, and responsibility to:

- (1) Exercise general supervision and control over the quality of all state waters, administer and enforce all laws relating to pollution of such waters, and administer and enforce this part, and all standards, policies, rules, and regulations promulgated under this part;
- (2) Administer oaths, issue subpoenas, and compel the attendance of witnesses and production of necessary data for all purposes of this part;
- (3) Bring suit in the name of the department for any violation of the provisions of this part, seeking any remedy provided in this part, and any other statutory or common law remedy available for the control, prevention, and abatement of pollution;
- (4) Proceed against, as provided in this part, any owner or operator of any boat, located or operated on the waters of the state, that discharges or causes to be discharged any sewage, other wastes, or other substances into such waters in violation of this part or any rules or regulations promulgated under this part;
- (5) Make inspections and investigations, carry on research, or take such other action as may be necessary to carry out this part;



- (6) Enter or authorize the commissioner's agents to enter at all reasonable times upon any property other than dwelling places for the purpose of conducting investigations and studies or enforcing any of this part;
- (7) Advise, consult, cooperate, contract, and make other binding agreements with the various agencies of the federal government and with state and local administrative and governmental agencies, colleges and universities, or with any other persons;
- (A) In furtherance of this part, the commissioner may require any state or local agency to investigate and report on any matters involved in water quality control; provided, that the burden, including costs, of such reports shall bear a reasonable relationship to the need for the reports and the benefits to be obtained from the reports; and
- (B) The department has the authority, subject to approval by the governor, to enter into agreements with other states and the United States relative to prevention and control of pollution in interstate waters. This authority is not deemed to extend to the modification of any agreement with the state concluded by direct legislative act, but unless otherwise expressly provided, the department shall be the agency for the administration and enforcement of any such legislative agreement;
- (8) Apply for, accept, administer, and utilize loans and grants from the federal government, state government, and from any other sources, public or private, for prevention, abatement, and control of pollution of the waters of the state. The department is the water quality control agency for the state for the purpose of any federal water pollution control act;
- (9) Prepare, publish, and issue such printed pamphlets and bulletins as the department deems necessary for the dissemination of information to the public concerning its activities;
- (10) Require the submission of such plans, specifications, technical reports, and other information as deemed necessary to carry out this part or to carry out the rules and regulations adopted pursuant to this part;
- (11) Be the administrative agent for the board and panel to carry out this part;
- (12) Make an annual report to the governor and the general assembly on the status of water quality, including a description of the plan, regulations in effect, and other pertinent information, together with any recommendations the commissioner may care to make;
- (13) Delegate to the director of the division with responsibility for water quality control any of the powers, duties, and responsibilities of the



commissioner under this part, except the commissioner's powers, duties and responsibility as chair of the board;

(14) Issue permits and variances pursuant to § 69-3-108;

(15) Inspect waters of the state where good cause is shown that the public health is threatened by pollutants in the waters, and, upon verification by the commissioner, post or cause to be posted such signs as required to give notice to the public of the potential or actual dangers of specific uses of such waters or restrictions of uses of such waters;

(16) Assess civil penalties in accordance with § 69-3-115;

(17) Apply this part against any person who discharges into a publicly owned treatment works who is causing a violation of this part, or who is in violation of applicable pretreatment standards;

(18) Impose such restrictions, including an immediate cessation of connections and line extensions, upon the expansion of any sewerage or wastewater system as are necessary to mitigate or prevent violations of this part;

(19) Prepare a written report on stream bank erosion in Tennessee to be delivered to each member of the general assembly by January 15, 2000. Such report shall contain the following:

(A) An examination of the causes of stream bank erosion;

(B) The effectiveness of existing and new methods of bank protection;

(C) An assessment of stream bank erosion in Tennessee; and

(D) Any other matter the commissioner deems relevant to stream bank erosion that may be of concern to the general assembly;

(20) Conduct, or cause to be conducted, demonstration projects, to the extent of available funds, of methods of bank stabilization and debris removal in streams in western Middle Tennessee to be done as soon as is practicable and a report shall be made to the general assembly after the performance of the chosen techniques has been observed through at least a full year;

(21) Conduct, or cause to be conducted, a study or project comparing different techniques for stream bank stabilization and debris removal in streams in western Middle Tennessee to be done as soon as possible, either in conjunction with the project mentioned in subdivision (20), or separately;

(22) Develop a program of public education regarding simple, practical and affordable techniques for cleaning debris from streams and for stabilizing stream banks, including field examples of activities



permissible without permits and activities that may be accomplished if permits are obtained;

(23) Produce a video by not later than January 1, 1999, that shows the above examples, explains the requirements of the law and rules for these activities, including the process of applying for a permit, and tells who to call for further assistance, which shall be distributed at no cost to public libraries and agricultural extension services;

(24) Perform a thorough and ongoing study of, and prepare recommendations regarding options for, the protection of watersheds and the control of sources of pollution, in order to assure the future quality of potable drinking water supplies throughout the state. The department is authorized to use information and studies from state, federal, and local governments and other sources of reliable scientific data. Initial findings and recommendations shall be presented to the governor and the general assembly no later than February 1, 2007, and annually thereafter; and

(25) Develop and submit to the board for comment proposed guidance that provides:

(A) Instructions, examples and definitions based upon scientifically based principles for consistently and accurately making hydrologic determinations; and

(B) Minimum qualifications for staff who are responsible for making or reviewing wet weather conveyance determinations.

TN Code §§ 69-3-108. Permits.

(a) Every person who is or is planning to carry on any of the activities outlined in subsection (b), other than a person who discharges into a publicly owned treatment works or who is a domestic discharger into a privately owned treatment works, or who is regulated under a general permit as described in subsection (l), shall file an application for a permit with the commissioner or, when necessary, for modification of such person's existing permit.

(b) It is unlawful for any person, other than a person who discharges into a publicly owned treatment works or a person who is a domestic discharger into a privately owned treatment works, to carry out any of the following activities, except in accordance with the conditions of a valid permit:

(1) The alteration of the physical, chemical, radiological, biological, or bacteriological properties of any waters of the state;



- (2) The construction, installation, modification, or operation of any treatment works, or part thereof, or any extension or addition thereto;
- (3) The increase in volume or strength of any wastes in excess of the permissive discharges specified under any existing permit;
- (4) The development of a natural resource or the construction, installation, or operation of any establishment or any extension or modification thereof or addition thereto, the operation of which will or is likely to cause an increase in the discharge of wastes into the waters of the state or would otherwise alter the physical, chemical, radiological, biological or bacteriological properties of any waters of the state in any manner not already lawfully authorized;
- (5) The construction or use of any new outlet for the discharge of any wastes into the waters of the state;
- (6) The discharge of sewage, industrial wastes or other wastes into waters, or a location from which it is likely that the discharged substance will move into waters;
- (7)
 - (A) The construction, installation, or operation of a liquid waste management system supporting an animal feeding operation that stables or confines as many as, or more than, the numbers of animals specified by federal law defining a large concentrated animal feeding operation;
 - (B) A state operating permit issued pursuant to this subdivision (b)(7) shall be enforceable only in regards to submission and maintenance of a current approved nutrient management plan;
 - (C) Animal feeding operations that are not required under this subdivision (b)(7) to have a permit may apply for and be issued a state operating permit. An animal feeding operation issued a state operating permit pursuant to this subdivision (b)(7) is required to conduct such operations in accordance with the permit;
- (8) The discharge of sewage, industrial wastes, or other wastes into a well or a location where it is likely that the discharged substance will move into a well, or the underground placement of fluids and other substances that do or may affect the waters of the state;
- (9) The diversion of water through a flume for the purpose of generation of electric power by a utility; or



(10)

(A) Animal feeding operations that are required under the federal Clean Water Act (33 U.S.C. § 1251 et seq.), to have a permit for concentrated animal feeding operations. Such operations must be conducted in accordance with the conditions of a valid national pollutant discharge elimination system (NPDES) permit;

(B) Animal feeding operations that are not required under the federal Clean Water Act to have a permit for concentrated animal feeding operations may apply for and, if eligible under federal law, be issued a NPDES permit. An animal feeding operation issued a NPDES permit pursuant to this subdivision (b)(10)(B) is required to conduct such operations in accordance with the permit.

(c) Any person operating or planning to operate a sewerage system shall file an application with the commissioner for a permit or, when necessary, for modification of such person's existing permit. Unless a person holds a valid permit, it is unlawful to operate a sewerage system.

(d) Nothing in this section shall be construed to require any person discharging into a septic tank connected only to a subsurface drainfield, or any person constructing or operating a sanitary landfill between March 25, 1980, and March 24, 1982, except in a county having a population of not less than sixty thousand two hundred fifty (60,250) nor more than sixty thousand three hundred fifty (60,350), according to the 1970 federal census or any subsequent federal census, as defined and regulated by §§ 68-211-101 -- 68-211-115, to secure a permit; provided, that the exemption provided in this subsection (d) shall not exempt such person from any other provision of this part; and provided further, that any such person who is exempt from obtaining a permit for constructing or operating a sanitary landfill between March 25, 1980, and March 24, 1982, shall not thereafter be required to obtain such permit.

(e) Applicants for permits that would authorize a new or expanded wastewater discharge into surface waters shall include in the application consideration of alternatives, including, but not limited to, land application and beneficial reuse of the wastewater.

(f) With regard to permits for activities related to the surface mining of coal:

(1) No permit shall be issued that would allow removal of coal from the earth from its original location by surface mining methods or surface access points to underground mining within one hundred feet (100') of the ordinary high water mark of any stream or allow overburden or waste materials from removal of coal from the earth by surface



mining of coal to be disposed of within one hundred feet (100') of the ordinary high water mark of a stream; provided, however, that a permit may be issued or renewed for stream crossings, including, but not limited to, rail crossings, utilities crossings, pipeline crossings, minor road crossings, for operations to improve the quality of stream segments previously disturbed by mining and for activities related to and incidental to the removal of coal from its original location, such as transportation, storage, coal preparation and processing, loading and shipping operations within one hundred feet (100') of the ordinary high water mark of a stream if necessary due to site specific conditions that do not cause the loss of stream function and do not cause a discharge of pollutants in violation of water quality criteria. Nothing in this subdivision (f)(1) shall apply to placement of material from coal preparation and processing plants;

(2) Without limiting the applicability of this section, if the commissioner determines that surface coal mining at a particular site will violate water quality standards because acid mine drainage from the site will not be amenable to treatment with proven technology both during the permit period or subsequent to completion of mining activities, the permit shall be denied.

(g) The commissioner may grant permits authorizing the discharges or activities described in subsection (b), including, but not limited to, land application of wastewater, but in granting such permits shall impose such conditions, including effluent standards and conditions and terms of periodic review, as are necessary to accomplish the purposes of this part, and as are not inconsistent with the regulations promulgated by the board. Under no circumstances shall the commissioner issue a permit for an activity that would cause a condition of pollution either by itself or in combination with others. In addition the permits shall include:

(1) The most stringent effluent limitations and schedules of compliance, either promulgated by the board, required to implement any applicable water quality standards, necessary to comply with an areawide waste treatment plan, or necessary to comply with other state or federal laws or regulations;

(2) A definite term, not to exceed five (5) years, for which the permit is valid. This term shall be subject to provisions for modification, revocation or suspension of the permit;

(3) Monitoring, recording, reporting, and inspection requirements; and



(4) In the case of permits authorizing discharges from publicly owned treatment works, terms and conditions requiring the permittee to enforce user and cost recovery charges, pretreatment standards, and toxic effluent limitations applicable to industrial users discharging into the treatment works.

(h) The commissioner may revoke, suspend, or modify any permit for cause, including:

(1) Violation of any terms or conditions of the permit or of any provision of this part;

(2) Obtaining the permit by misrepresentation or failing to disclose fully all relevant facts; or

(3) A change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge.

(i) No permit under subsection (g) or (h) for the construction of any new outlet or for construction activities involved in the development of natural resources, for the construction of a new waste treatment system or for the modification or extension of an existing waste treatment system shall be issued by the commissioner until the plans have first been submitted to and approved by the commissioner. No such approval shall be construed as creating a presumption of correct operation nor as warranting by the commissioner that the approved facilities will reach the designated goals. If an environmental impact statement is required for any permit, the commissioner may require the applicant to pay for its preparation. Any such impact statement must also include and address economic and social impact.

(j) Any permit procedure or other action required by or undertaken in accordance with this section or part shall be conducted in accordance with title 13, chapter 18, when the permit or action involves a major energy project, as defined in § 13-18-102.

(k) Nothing in this section shall be construed to limit or circumscribe the authority of the commissioner to issue emergency orders as specified in § 69-3-109.

(l) Where the commissioner finds that a category of activities or discharges would be appropriately regulated under a general permit, the commissioner may issue such a permit. Any person conducting activities in the category covered by a general permit shall not be required to file individual applications for permits except as provided in specific requirements of the general permit. Any person conducting activities covered under a general permit



may be required by the commissioner to file an application for any individual permit. Upon the issuance of an individual permit to a person with a general permit, the applicability of the general permit to that permitted activity or discharge shall be terminated. Any person who holds an individual permit for an activity or discharge covered under the provisions of a general permit may request that the individual permit be revoked. Upon such revocation, the activity or discharge shall become subject to the provisions of the general permit.

(m) Notwithstanding subsection (g), upon application by a person who discharges into groundwaters of the state and who is subject to a permit issued pursuant to the Hazardous Waste Management Act, compiled in title 68, chapter 212, the commissioner may issue variances from the applicable water quality standards, criteria, or classification for groundwater; provided, that:

- (1) The waters to which the variance applies are not used as a current source of drinking water and such use is not reasonably anticipated for the term of the variance and a reasonable time thereafter;
- (2) The applicant demonstrates that such discharges will not pose a substantial present or potential hazard to human health or the environment as defined in Tenn. Comp. R. & Reg. 1200-01-11-.06(6)(e)(2) (reserved) in effect on April 1, 1988, and will not impair any actual, current uses other than those affected by the variance;
- (3) Variances will be effective for a specific term, not to exceed the effective term of the permit;
- (4) The variance is consistent with the Federal Water Pollution Control Act, compiled in 33 U.S.C. § 1251 et seq., and the federal Safe Drinking Water Act, compiled in 42 U.S.C. § 300f et seq.; and
- (5) The variance provided for under this subsection (m) shall be applied for and issued in accordance with procedures regarding the issuance of permits as required by regulations issued under this chapter.

(n)

- (1) A chief administrative officer of a county highway department does not violate this chapter by repairing or causing the repair of up to four hundred feet (400') of highway or road in an emergency situation, if immediate repairs are necessary to protect human safety and welfare, and if such repairs comply with rules and regulations promulgated by the board that regulate the manner in which the repairs are made.



Such officer need not obtain a permit prior to making such repairs under such circumstances.

(2) As soon as practicable, the chief administrative officer of a county highway department shall notify the commissioner by telephone that an emergency has arisen and that such chief administrative officer intends to make repairs in response to such emergency. The giving of such notice shall not be construed to authorize the commissioner to terminate such repairs.

(3) Within ten (10) days of the completion of any highway or road repair made pursuant to this subsection (n), the chief administrative officer of the county highway department ordering such repair shall notify the commissioner, in writing, of the action taken and the nature of the emergency necessitating such immediate repair.

(o) The following activities do not require a permit under this section:

(1) The removal of downed trees by dragging or winching and without grading or reshaping of the stream channel;

(2) The placement of downed trees on stream banks for erosion protection; and

(3) The planting of vegetation on stream banks.

(p) Unless the applicant agrees otherwise, when an individual landowner applies for a permit for debris removal or stream bank stabilization activities, the commissioner shall either issue or deny the permit or take action scheduling a public hearing on the application within sixty (60) days of receipt of a complete application; provided further, however, that the staff of the division will communicate orally or in writing to the applicant within fifteen (15) days of receipt of any such application.

(q)

(1) The alteration of a wet weather conveyance, as defined in § 69-3-103, by any activity is permitted by this subsection (q) and shall require no notice or approval; provided, that it is done in accordance with all of the following conditions:

(A) The activity may not result in the discharge of waste or other substances that may be harmful to humans or wildlife;

(B) Material may not be placed in a location or manner so as to impair surface water flow into or out of any wetland area;



(C)

(i) Sediment shall be prevented from entering other waters of the state;

(ii) Erosion and sediment controls shall be designed according to the size and slope of disturbed or drainage areas to detain runoff and trap sediment and shall be properly selected, installed, and maintained in accordance with the manufacturer's specifications and good engineering practices;

(iii) Erosion and sediment control measures shall be in place and functional before earth moving operations begin, and shall be constructed and maintained throughout the construction period. Temporary measures may be removed at the beginning of the work day, but shall be replaced at the end of the work day;

(iv) Checkdams shall be utilized where runoff is concentrated. Clean rock, log, sandbag or straw bale checkdams shall be properly constructed to detain runoff and trap sediment. Checkdams or other erosion control devices are not to be constructed in stream. Clean rock can be of various type and size, depending on the application. Clean rock shall not contain fines, soils or other wastes or contaminants; and

(D) Appropriate steps shall be taken to ensure that petroleum products or other chemical pollutants are prevented from entering waters of the state. All spills shall be reported to the appropriate emergency management agency and to the division. In the event of a spill, measures shall be taken immediately to prevent pollution of waters of the state, including groundwater.

(2) There shall be no additional conditions upon a person's activity within a wet weather conveyance. This subdivision (q)(2) does not apply to national pollutant discharge elimination system (NPDES) permits.

(r) A person desiring to alter a specific water of the state may request a determination from the commissioner that it is a wet weather conveyance and submit a report from a qualified hydrologic professional in support of the request. If the report contains all information that is required in rules promulgated by the board, and in accordance with department procedures and guidance, and is certified by a qualified hydrologic



professional to be true, accurate and complete and, if submitted after promulgation of the rules required by § 69-3-105(1), contains all information that is required in those rules, then the determination made in the report shall be presumed to be correct, unless the commissioner notifies the person, in writing, within thirty (30) days of submittal of the report, that the commissioner has affirmatively determined that there is a significant question about whether the water of the state in question is a stream or a wet weather conveyance and states the reasons for that determination. In that event, the commissioner must, within thirty (30) days following the initial notification, determine whether the water of the state in question is a stream or a wet weather conveyance and notify the person in writing of that decision and the reasons for that determination. A person may appeal a determination by the commissioner that the specific water is a stream by filing a petition for appeal with the board within thirty (30) days of receiving the commissioner's decision. For purposes of this subsection (r), a qualified hydrologic professional is a person holding a bachelor's degree in biology, geology, ecology, engineering or related sciences, having at least five (5) years of relevant experience in making hydrologic determinations and who has been certified as a hydrologic professional pursuant to rules promulgated by the board.

(s) Any national pollutant discharge elimination system (NPDES) permit issued pursuant to this section to a local governmental entity administering a municipal separate storm sewer system shall not impose post-construction storm water requirements, except to the extent necessary to comply with the minimum requirements of federal law. Any such NPDES permit that includes numeric or narrative effluent limitations to manage post-construction storm water shall allow the local governmental entity administering a municipal separate storm sewer system discretion in selecting measures to meet any such effluent limitations. These numeric or narrative effluent limitations to manage post-construction stormwater shall be adopted by the board as rules pursuant to the Uniform Administrative Procedures Act, compiled in title 4, chapter 5.

(t) This state shall not require any local governmental entity that administers a municipal separate storm sewer system under a national pollutant discharge elimination system (NPDES) permit issued pursuant to this section to impose control measures for post-construction storm water that exceed the minimum requirements of federal law. Any local governmental entity that adopts control measures that exceed the minimum requirements of federal law must do so by ordinance or resolution, as appropriate, by the local legislative body upon a majority vote. This subsection (t) shall not apply to any ordinance or resolution in effect on April 23, 2016, but shall not preclude a local governmental entity that administers a municipal separate storm sewer system from making changes consistent with subsection (s) and this subsection (t).



When a local governmental entity seeks coverage under any future version of the NPDES permit after April 23, 2016, such ordinance or resolution shall comply with subsection (s) and this subsection (t). The local government entity shall provide in writing the control measures that exceed federal minimum requirements to the local legislative body at least thirty (30) days in advance of a vote in order to provide for a public comment period.

(u)

(1) Notwithstanding any other law, a person who has contracted for the right to store water in a reservoir owned by the U.S. Army Corps of Engineers shall have exclusive rights to any return flows generated directly or indirectly to that reservoir by the person. The rights conferred by this subsection (u) shall be subject to any regulatory requirements imposed by the commissioner and to the availability to the person of unused storage capacity within the reservoir to store such return flows.

(2) As used in this subsection (u), "return flow" means water that is discharged directly or indirectly to a reservoir from a water reclamation facility.

(v)

(1) Compliance with a national pollutant discharge elimination system (NPDES) permit issued under this section shall be deemed compliance for purposes of §§ 69-3-109; 69-3-114(a); 69-3-114(b) with respect to this part or any rule, regulation, or standard of water quality promulgated by the board; 69-3-115; 69-3-116; 69-3-117; and 69-3-118(a), except for any standard imposed under Section 307 of the Federal Water Pollution Control Act for a toxic pollutant injurious to human health.

(2) Compliance includes the discharge of pollutants for which no standard or limit is set forth in the permit if:

(A) The permit holder complies with applicable reporting and disclosure requirements under this part; and

(B) The discharge of pollutants is disclosed to the department in such a manner that the discharge is within the reasonable contemplation of the department at the time of issuance of the final permit.

TN Code §§ 69-3-141. Bill of rights for permit applicants.



(a) The general assembly finds and adopts as a matter of public policy, the following statements:

- (1) The permitting process under this chapter should be a predictable, ordinary process for the benefit of the commissioner and permit applicants alike;
- (2) As with all governmental regulatory activity, the permitting process under this chapter should be susceptible to easy public review and scrutiny;
- (3) The permitting process under this chapter should afford applicants basic due process, including notice of application defects, timely review of applications, and prompt and meaningful administrative and judicial review of permitting decisions;
- (4) The permitting process under this chapter should reflect an appropriate balance between enforcement of the state's environmental laws and the rights of persons seeking to comply voluntarily with those same laws, in order to safeguard our state's environment and develop our state's economy; and
- (5) To further these goals, to protect the rights of applicants, and to promote efficient, effective resolution of permit applications by the commissioner, the general assembly enacts this bill of rights for permit applicants under this chapter.

(b) The commissioner shall afford each applicant for a permit under this chapter the following rights under this bill of rights for permit applicants:

- (1) Permit applicants shall have the right to assistance from the department in understanding regulatory and permit requirements;
- (2) Permit applicants shall have the right to know the projected fees for review of applications, and how any costs will be determined and billed;
- (3) Permit applicants shall have the right to access, on the department's web site, complete and clearly written guidance documents, office of general counsel opinions, and department policies that explain the department's regulatory jurisdiction and requirements. The commissioner shall publish, on the department's web site, a list of all information required in a permit application and the criteria used to determine whether the submitted information is adequate;
- (4) Permit applicants shall have the right to timely completeness determinations for their applications. Permit applicants shall have



the right to know exactly how their applications are incomplete and what further information is needed to make their applications complete. Absent extraordinary circumstances, the commissioner shall notify the applicant within thirty (30) days of any permit application deficiencies, or determine that the application is complete;

(5) Permit applicants shall have the right to a timely decision on their permit application. The following time limits shall apply:

(A) Aquatic resource alteration permits (ARAPs) shall be issued or denied within ninety (90) days of the date the department determines an application is complete. If a public hearing is scheduled in response to a request from interested parties, an additional ninety (90) days shall be added to the allowable time limit. The ninety-day time limit may be extended by written mutual agreement between the commissioner and the permit applicant;

(B) Applications for the reissuance of national pollutant discharge elimination system (NPDES) permits shall be issued or denied within one hundred eighty (180) days of the date the department determines an application is complete. If a public hearing is scheduled, in response to comments by interested parties, additional time is requested by the applicant, or additional time is requested by the EPA, an additional ninety (90) days shall be added to the allowable time limit;

(C) Applications for new or modified NPDES permits shall be issued or denied within three hundred sixty-five (365) days of the date the department determines an application is complete. If a public hearing is scheduled, in response to comments by interested parties or additional time is requested by the EPA, an additional ninety (90) days shall be added to the allowable time limit. No other extension shall be granted, except by written mutual agreement between the commissioner and the permit applicant;

(6) Permit applicants shall have the right to appeal to the board any permit review time limits that have been violated without good cause. Through this appeal, applicants may obtain a set date for a decision on their permit and, where the board finds good cause, appropriate relief, including, but not limited to, a refund of all application fees; and



(7) Permit applicants shall have the right to know who will be reviewing their application and the time required to complete the full review process.

TN Comp Rules and Regs 0400-40-05-.02. DEFINITIONS.

All terminology not specifically defined herein shall be defined in accordance with the Water Quality Control Act of 1977, T.C.A. Title 69, Chapter 3, Part 1. When used in this chapter and in permits issued pursuant to this chapter, the following terms have the meanings given below unless otherwise specified:

- (1) "Act" or "TWQCA" means the Water Quality Control Act of 1977, T.C.A. Title 69, Chapter 3, Part 1.
- (2) "Administrator" means the administrator of the United States Environmental Protection Agency (EPA), or an authorized representative.
- (3) "Agricultural stormwater discharge" means a precipitation-related discharge of manure, litter or process wastewater from land areas under the control of an AFO where the manure, litter, or process wastewater has been applied in accordance with site-specific nutrient management practices that ensure appropriate agricultural utilization of the nutrients in the manure, litter, or process wastewater, as specified in parts (10)(a)7. through 10. of Rule 0400-40-05-.14.
- (4) "Ammonia (as N)" means ammonia reported as nitrogen.
- (5) "Animal Feeding Operation" or "AFO" means a facility that (1) stables, confines, and feeds or maintains animals (other than aquatic animals) for a total of 45 days or more in any 12-month period, and (2) does not sustain crops, vegetation, forage growth, or post-harvest residues in the normal growing season over any portion of the facility. Two or more AFOs under common ownership are considered to be a single AFO for the purposes of determining the number of animals at an operation, if they adjoin each other or if they use a common area or system for the disposal of wastes.
- (6) "AFO overflow" means the discharge of manure or process wastewater resulting from the filling of wastewater or manure storage structures beyond the point at which no more manure, process wastewater, or stormwater can be contained by the structure.
- (7) "AFO production area" includes the animal confinement area, the manure storage area, the raw materials storage area, and the waste containment areas.

(a) 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.

(b) 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.

(c) The raw materials storage area includes but is not limited to feed silos, silage bunkers, and organic bedding materials.

(d) The waste containment area includes but is not limited to settling basins and areas within berms and diversions that separate uncontaminated stormwater.

(e) The production area also includes any on-farm egg washing or egg processing facility, and any area used in the storage, handling, treatment, or on-farm disposal of mortalities.

(8) "Animal Waste Management System" means any system used for the collection, storage, treatment, handling, transport, distribution, land application, or disposal of agricultural wastes, animal waste/wastewater, waste product, and dead animals generated by an AFO that meets or exceeds USDA-NRCS technical standards and guidelines.

(9) "Area-wide waste treatment management plan" means a plan that has been approved by the administrator pursuant to § 208 (33 U.S.C. § 1288) of the Clean Water Act (CWA), Public Law 92-500.

(10) "BATEA" or "BAT" means the best available technology economically achievable as defined by EPA regulations. Effluent limitations established by this designation shall be effective in accordance with the requirements of Section 301(b)(2)(A), Federal Water Pollution Control Act, PL 92-500.

(11) "Biological monitoring" means the determination of the effects on aquatic life, including accumulation of pollutants in tissue, in receiving waters due to the discharge of pollutants (a) by techniques and procedures, including sampling of organisms representative of appropriate levels of the food chain appropriate to the volume and the physical, chemical, and biological



characteristics of the effluent, and (b) at appropriate frequencies and locations.

(12) "BOD₅" means 5-day biochemical oxygen demand.

(13) "BPTCA" means the best practicable control technology currently available, as defined by EPA regulations.

(14) "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility.

(15) "Calendar day" means the 24-hour period from midnight to midnight or any other 24-hour period that reasonably approximates the midnight to midnight time period.

(16) "CBOD₅" means 5-day carbonaceous biochemical oxygen demand.

(17) "Closure plan" means a description of the steps taken after a permittable activity has ceased to prevent contamination of surface waters from the inactive site.

(18) "Combined sewer overflow" or "CSO" means a discharge from a combined sewer system (CSS) at a point prior to the publicly owned treatment works (POTW) treatment plant headworks.

(19) "Combined sewer system" or "CSS" means a wastewater collection system owned by a State or municipality which was originally designed to convey sanitary wastewaters (domestic, commercial, and industrial wastewaters) and stormwater through a single-pipe system into a publicly owned treatment works (POTW) treatment plant headworks.

(20) "Commencement of construction" means the initial disturbance of soils associated with clearing, grading, or excavating activities or other construction activities.

(21) "Commissioner" means the Commissioner of the Department of Environment and Conservation or the Commissioner's duly authorized representative and, in the event of the Commissioner's absence or a vacancy in the office of Commissioner, the Deputy Commissioner for Environment.

(22) "Composite sample" means a combination of not less than eight influent or effluent portions (aliquots), collected over a 24-hour period. Under certain circumstances a lesser time period may be allowed, but in no case less than eight hours. A sufficient volume of sample to perform all required analyses plus any additional amount for quality control must be obtained. For automatic samplers that use a peristaltic pump, a minimum 100ml aliquot must be obtained.



(23) "Concentrated animal feeding operation" or "CAFO" means an AFO that either meets the large (Class I) CAFO size criteria of paragraph (2) of Rule 0400-40-05-.14, the medium (Class II) CAFO criteria of paragraph (3) of Rule 0400-40-05-.14, or has otherwise been designated as a CAFO by the Director.

(24) "Construction" means any placement, assembly, or installation of facilities or equipment (including contractual obligations to purchase such facilities or equipment) at the premises where such equipment will be used, including preparation work at such premises.

(25) "Daily maximum amount" means the total amount of any pollutant in the discharge by weight during any calendar day.

(26) "Daily maximum concentration" means the average concentration, in units of mass per volume during any calendar day. When a proportional-to-flow composite sampling device is used, the daily concentration is the concentration of that 24-hour composite; when other sampling means are used, the daily concentration is the arithmetic mean of the concentrations of equal volume samples collected during any calendar day or sampling period.

(27) The meaning of "degradation" shall be the same as defined in Rule 0400-40-03-.04.

(28) "Department" means the Department of Environment and Conservation.

(29) "Director" means the director of the Division of Water Resources.

(30) "Discharge" or "discharge of a pollutant" refers to the addition of pollutants to waters from a source.

(31) "Division" means the Division of Water Resources.

(32) "Dry weather overflow" means a sanitary sewer overflow that is not directly related to a rainfall event.

(33) "Effluent limitation" means any restriction, established by the Board or the Commissioner, on quantities, discharge rates, or concentrations of chemical, physical, biological, or other constituents which are discharged into waters or adjacent to waters.

(34) "Fecal coliform" means fecal coliform bacteria, an indicator of pathogenic organisms.

(35) The "geometric mean" of any set of values means the n th root of the product of the individual values where n is equal to the number of individual values. The geometric mean is equivalent to the antilog of the arithmetic



mean of the logarithms of the individual values. For the purposes of calculating the geometric mean, values of zero shall be considered to be one.

(36) "Grab sample" means a single sample collected at a particular time.

(37) "Hydrologic connection" means the interflow and exchange between surface impoundments or containment structures and groundwater or surface water through an underground corridor or pathway. In the context of this chapter, the purpose of prevention/reduction of hydrologic connection is to prevent/reduce groundwater flow contact resulting in the transfer of pollutants into groundwater.

(38) "IC25" means the inhibition concentration in which at least a 25% reduction in reproduction and/or growth in test organisms occurs.

(39) "Industrial discharger" means those industries identified in the standard industrial classification manual, Bureau of the Budget, 1987, as amended and supplemented, under the category "Division D - Manufacturing" and such other classes of significant waste producers as the Board or Commissioner deems appropriate.

(40) "Industrial wastes" means any liquid, solid, or gaseous substance, or combination thereof, or form of energy including heat, resulting from any process of industry, manufacture, trade, or business or from the development of any natural resource.

(41) "Instantaneous maximum concentration" means the concentration, in units of mass per volume, of any pollutant parameter in a grab sample taken at any point in time.

(42) "Instantaneous minimum concentration" means the minimum concentration, in units of mass per volume, of a pollutant parameter in a grab sample taken at any point in time.

(43) "Land application area" means the land under the control of an AFO owner or operator to which manure, litter, or process wastewater from the AFO production area is or may be applied.

(44) "Large CAFO" or "Class I CAFO" means an AFO that confines greater than or equal to the number of animals specified in TABLE 0400-40-05-.14.1.

(45) "LC50" means the concentration that causes at least 50% lethality of the test organisms.

(46) "Major facility" means a municipal or domestic wastewater treatment plant with a design capacity of one million gallons per day or greater; or any other facility or activity classified as such by the Commissioner.



(47) "Manure" includes manure, bedding, compost and raw materials or other materials comingled with manure or set aside for disposal.

(48) "Mature dairy cow" means a cow that has previously given birth to a calf.

(49) "Medium CAFO" or "Class II CAFO" means an AFO that falls within the size threshold for the animals specified in column 3 of TABLE 0400-40-05-.14.1 and also meets the criteria of paragraph (3) of Rule 0400-40-05-.14.

(50) "Minor facility" means any facility that is not a major facility.

(51) "Monthly average amount" means the arithmetic mean of all the measured daily samples by weight during the calendar month when the measurements were made.

(52) "Monthly average concentration" means the arithmetic mean of all samples collected in a one calendar-month period, expressed in units of mass per volume of any pollutant other than bacteria.

(53) "Multi-year phosphorus application" means phosphorus applied to a field in excess of crop needs and/or crop removal rates when there is no soil test recommendation for phosphorus and the Tennessee Phosphorus Index indicates manure, litter, or process wastewater should be applied at the crop phosphorus removal rate. Subsequent phosphorus application is prohibited until the applied phosphorus has been removed via harvest and/or crop removal or a subsequent soil test indicates phosphorus is required. Crop phosphorus removal rates are set by University of Tennessee Extension technical guidance documents for nutrient management.

(54) "Municipal separate storm sewer system" or "MS4" means a municipal separate storm sewer system as defined in the Clean Water Act, compiled in 33 U.S.C. § 1251 et seq., and the rules promulgated thereunder.

(55) "National Pollutant Discharge Elimination System" or "NPDES" means the national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under sections 307, 402, 318, and 405 of the federal CWA. The term includes an "approved program."

(56) "New or increased discharge" is a new discharge of pollutants to waters of the state or an increase in the authorized loading of a pollutant above either (1) numeric effluent limitations established in a National Pollutant Discharge Elimination System permit for that discharge, or (2) if no such limitations exist, the actual discharges of that pollutant.



(57) "New source" means any building, structure, facility, area, or installation from which there is or may be a "discharge of pollutants," the construction of which commenced after the publication of state or federal regulations prescribing a standard of performance.

(58) "Nitrate (as N)" means nitrate reported as nitrogen.

(59) "Non-contact cooling water" means cooling water that does not contact raw materials, materials being produced, finished product, by-products, or process wastewater. For some industrial categories, other, more specialized definitions related to non-contact cooling water may also apply.

(60) "Non-point source pollution" occurs when precipitation moves over and through the ground, picks up and carries away pollutants and deposits them into waters of the state.

(61) "One-hour average maximum" or "1-hour average maximum" means the concentration in units of mass per volume, of a composite consisting of any three equal volume grab samples collected consecutively at 30-minute intervals.

(62) "One week period" or "calendar-week" means the period from Sunday through Saturday. For reporting purposes, a calendar-week that contains a change of month shall be considered part of the latter month.

(63) "Owner or operator" means any person who owns, leases, operates, controls, or supervises a source.

(64) "Quarter" means any one of the following three-month periods: January 1 through March 31, April 1 through June 30, July 1 through September 30, and/or October 1 through December 31.

(65) "Permit" means an authorization, license, or equivalent control document issued by the Division of Water Resources which implements the requirements of the TWQCA.

(66) "Permit action" refers to the issuance, reissuance, revocation, denial, or modification of an individual permit.

(67) "Point source" means any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel, or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural stormwater runoff.



(68) "Person" means an individual, association, partnership, corporation, municipality, state or federal agency, or an agent or employee thereof.

(69) "Pollutant" means sewage, industrial wastes, or other wastes.

(70) "Pollution" means such alteration of the physical, chemical, biological, bacteriological, or radiological properties of the waters of this state including, but not limited to, changes in temperature, taste, color, turbidity, or odor of the waters that will:

(a) Result or will likely result in harm, potential harm, or detriment to the public health, safety, or welfare;

(b) Result or will likely result in harm, potential harm, or detriment to the health of animals, birds, fish, or aquatic life;

(c) Render or will likely render the waters substantially less useful for domestic, municipal, industrial, agricultural, recreational, or other reasonable uses; or

(d) Leave or likely leave the waters in such condition as to violate any standards of water quality established by the Board.

(71) "Process wastewater" for operations other than AFOs means any water which, during manufacturing or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, byproduct, or waste product.

(72) "Process wastewater" for AFOs means water directly or indirectly used in the operation of the AFO for any or all of the following: spillage or overflow from animal or poultry watering systems; washing, cleaning, or flushing pens, barns, manure pits, or other AFO facilities; direct contact swimming, washing, or spray cooling of animals; or dust control. Process wastewater also includes any water which comes into contact with any raw materials, products, or byproducts including manure, litter, feed, milk, eggs, or bedding.

(73) "Rainfall event" means 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. For purposes of Rule 0 40040-05-.14, "rainfall event" also includes, a 10-year, 24-hour rainfall event, a 25-year, 24-hour rainfall event, and a 100-year, 24-hour rainfall event which 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 Precipitation-Frequency Atlas of the United States. Atlas 14. Volume 2. Version 3.0. U.S. Department of Commerce. National Oceanic and Atmospheric Administration (NOAA),



National Weather Service, Hydrometeorological Design Studies Center, Silver Springs, Maryland or its digital product equivalent.

(74) "Rationale" or "fact sheet" means a document that is prepared when drafting an NPDES permit or permit action. It provides the technical, regulatory and administrative basis for an agency's permit decision.

(75) "Release" means the flow of sewage from any portion of the collection or transmission system owned or operated by a publicly owned treatment works (POTW) or a domestic wastewater treatment plant, other than through permitted outfalls, that does not reach waters. In addition, a "release" includes a backup into a building or private property that is caused by blockages, flow conditions, or other malfunctions originating in the collection or transmission system owned or operated by the permittee. A "release" does not include:

- (a) Backups into a building or private property caused by blockages or other malfunctions originating in a private lateral;
- (b) Events caused by vandalism;
- (c) Events caused by lightning strike;
- (d) Events caused by damage due to third parties working on other utilities in the right of way, e.g., cross bore from telecommunications line; or
- (e) Events that are directly incidental to planned, preventative, or predictive maintenance provided the site is under the direct control of a certified operator or contractor, public access is restricted, and the site is disinfected.

(76) "Sanitary sewer overflow" or "SSO" means an unpermitted discharge of wastewater from the collection or treatment system of a publicly owned treatment works (POTW) or a domestic wastewater treatment plant other than through a permitted outfall.

(77) "Schedule of compliance" means a schedule of remedial measures including an enforceable sequence of actions or operations leading to compliance with an effluent limitation, condition of a permit, other limitation, prohibition, standard, or regulation. This term includes, but is not limited to, schedules authorized by national effluent limitations guidelines or by Tennessee's water quality standards.

(78) "Setback" means a specified distance from surface waters or potential conduits to surface waters where manure, litter, and process wastewater



may not be land-applied. Examples of conduits to surface waters include but are not limited to: open tile line intake structures, sinkholes, and wells.

(79) "Severe property damage," when used to consider the allowance of a bypass, means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

(80) "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.

(81) "Sewerage system" means the conduits, sewers, and all devices and appurtenances by means of which sewage and other waste is collected, pumped, treated, or disposed.

(82) "Source" means any activity, operation, construction, building, structure, facility, or installation from which there is or may be the discharge of pollutants.

(83) "Standard of performance" means a standard for the control of the discharge of pollutants that reflects the greatest degree of effluent reduction that the Commissioner determines to be achievable through application of the best available demonstrated control technology, processes, operating methods, or other alternatives, including, where practicable, a standard permitting no discharge of pollutants.

(84) "Stormwater control measure" or "SCM" means permanent practices and measures designed to reduce the discharge of pollutants from new development projects or redevelopment projects.

(85) "Stream" means a surface water that is not a wet weather conveyance.

(86) "Total dissolved solids" or "TDS" means nonfilterable residue.

(87) "Toxic effluent limitation" means an effluent limitation on those pollutants or combinations of pollutants, including disease-causing agents, which after discharge and upon exposure, ingestion, inhalation or assimilation into any organism, either directly from the environment or indirectly by ingestion through food chains, will, on the basis of available information, cause death, disease, behavioral abnormalities, cancer, genetic mutations, physiological malfunctions (including malfunctions in reproduction) or physical deformations, in such organisms or their offspring.



(88) "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

(89) "USDA-NRCS" means the Natural Resources Conservation Service, an agency within the U.S. Department of Agriculture.

(90) "Variance" means an authorization issued to a person by the Commissioner, which would allow that person to cause a water quality standard to be exceeded for a limited time period without changing the standard.

(91) "Vegetated buffer" means a narrow, permanent strip of dense perennial vegetation established parallel to the contours of and perpendicular to the dominant slope of the field for the purposes of slowing water runoff, enhancing water infiltration, and minimizing the risk of any potential nutrients or pollutants from leaving the field and reaching waters. A vegetated buffer may also be referred to as a "filter strip."

(92) The term "washout" is applicable to activated sludge plants and means a loss of mixed liquor suspended solids (MLSS) of 30.00% or more from the aeration basin(s).

(93) "Watercourse" means a man-made or natural hydrologic feature with a defined linear channel that discretely conveys flowing water, as opposed to sheet-flow.

(94) "Waters" means any and all water, public or private, on or beneath the surface of the ground, which are contained within, flow through, or border upon Tennessee or any portion thereof except those bodies of water confined to and retained within the limits of private property in single ownership which do not combine or effect a junction with natural surface or underground waters.

(95) "Water quality riparian buffer" means a permanent strip of natural perennial vegetation adjacent to a stream, river, wetland, pond, or lake that contains dense vegetation made up of grass, shrubs, and/or trees. The purpose of a water quality riparian buffer is to maintain existing water quality by minimizing the risk of any potential sediments, nutrients, or other pollutants reaching adjacent surface waters and to further prevent negative water quality impacts by providing canopy over adjacent waters.



(96) "Weekly average amount" means the arithmetic mean of all the measured daily discharges by weight during the calendar week when the measurements were made.

(97) "Weekly average concentration" means the arithmetic mean of all the concentrations expressed in units of mass per volume of any pollutant measured in a calendar week.

(98) "Wet weather conveyance" means, notwithstanding any other law or rule to the contrary, man-made or natural watercourses, including natural watercourses that have been modified by channelization:

(a) That flow only in direct response to precipitation runoff in their immediate locality;

(b) Whose channels are at all times above the groundwater table;

(c) That are not suitable for drinking water supplies; and

(d) In which hydrological and biological analyses indicate that, under normal weather conditions, due to naturally occurring ephemeral or low flow there is not sufficient water to support fish, or multiple populations of obligate lotic aquatic organisms whose life cycle includes an aquatic phase of at least two months.

(99) "Wet weather overflow" means a sanitary sewer overflow that is directly related to a specific rainfall event.

(100) "Wet weather release" means a release that is directly related to a specific rainfall event.

TN Comp Rules and Regs 0400-40-05-.14. ANIMAL FEEDING OPERATIONS.

(1) In addition to the applicable provisions of Rules 0400-40-05-.01 through 0400-40-05-.13, CAFOs are also subject to the provisions of this rule.

(2) AFOs meeting or exceeding the size thresholds in the second column of TABLE 0400-40-05.14.1 are considered large (Class I) CAFOs.

(3) AFOs within the size thresholds given in the third column of TABLE 0400-40-05-.14.1 are considered medium (Class II) CAFOs if either of the following conditions are met:

(a) Pollutants are discharged into waters through a man-made ditch, flushing system, or other similar man-made device; or

(b) Pollutants are discharged directly into waters that originate outside of and pass over, across, or through the facility or



otherwise come into direct contact with the animals confined in the operation.

TABLE 0400-40-05-.14.1

Animal Type	Large (Class I) CAFO	Medium (Class II) CAFO
Mature dairy cows (milked or dry)	700+	200 - 699
Veal calves	1000+	300 - 999
Cattle ¹	1000+	300 - 999
Swine	2,500+ (>=55 lbs)	750 - 2,499 (>=55 lbs)
	10,000 (< 55 lbs)	3,000 - 9,999 (< 55 lbs)
Chickens (liquid waste management)	30,000+ (laying hens or broilers)	9,000 - 29,999
Chickens (dry waste management ²)	125,000+ (non-layers)	37,500 - 124,999 (non-layers)
	82,000+ (layers)	25,000 - 81,999 (layers)
Horses	500+	150 - 499
Sheep/lambs	10,000+	3,000 - 9,999
Turkeys	55,000+	16,500 - 54,999
Ducks (liquid waste management)	5,000+	1,500 - 4,999
Ducks (dry waste management ²)	30,000+	10,000 - 29,999

¹ Other than mature dairy cows or veal calves. Cattle includes, but is not limited to, heifers, steers, bulls, and cow/calf pairs.



² 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.

(4) Other AFOs may be designated as CAFOs at the discretion of the Director. Factors to be considered in this determination include the AFO's size; the amount of waste reaching waters of the state; the location of the AFO; the means of waste conveyance to waters of the state; and the slope, vegetation, rainfall, and other factors affecting the likelihood or frequency of discharge of animal wastes into waters of the state. The Director shall conduct an on-site inspection prior to determining that an operation should be regulated under the CAFO permit program. AFOs below the threshold for a medium CAFO (shown in the third column in TABLE 0400-40-05-.14.1) may not be designated as a CAFO unless:

(a) Pollutants are discharged into waters through a man-made ditch, flushing system, or other similar man-made device; or

(b) Pollutants are discharged directly into waters that originate outside of and pass over, across, or through the facility or otherwise come into direct contact with the animals confined in the operation.

(5) The following AFOs shall seek permit coverage as follows:

(a) Large, medium, and designated CAFOs that discharge shall obtain an individual NPDES permit and the permit shall be in effect prior to any discharge.

(b) Large AFOs, based on the animal numbers located in TABLE 0400-40-05-.14 -1, that utilize liquid waste management systems, shall obtain coverage under a state permit.

(6) All AFOs seeking to obtain NPDES permit coverage shall submit application information in accordance with paragraph (2) of Rule 0400-40-05-.05.

(a) All AFOs seeking to obtain permit coverage shall submit application information to the Commissioner.

(b) In addition to the application requirements of paragraph (2) of Rule 0400-40-05-.05, AFOs seeking permit coverage shall submit, at the time of application, a nutrient management plan as outlined in paragraph (10) of this rule.

(7) (Reserved).



(8) AFOs seeking to maintain permit coverage shall comply with the permit reissuance requirements of paragraph (5) of Rule 0400-40-05-.05.

(9) AFOs obtaining permit coverage shall develop and maintain a current approved nutrient management plan and have all measures, structures, etc., in place to fully implement the plan upon the date of permit coverage. Any NPDES permit issued to an AFO shall require compliance with the terms of the AFO's site-specific nutrient management plan such that the plan is enforceable through the permit.

(10) Nutrient Management Plan (NMP) Requirements.

(a) Any permit issued to an AFO shall include a requirement to develop, submit and obtain Commissioner approval of, and keep on site a site-specific nutrient management plan that:

1. Includes best management practices and procedures necessary to implement applicable effluent limitations and standards;
2. Ensures adequate storage of manure, litter, and process wastewater including procedures to ensure proper operation and maintenance of the storage facilities;
3. Ensures 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 as outlined in USDA-NRCS Conservation Practice Standard 316 (February 2016) and/or the USDA-NRCS Agricultural Waste Management Handbook (April 1992), and/or University of Tennessee Extension publications;
4. Ensures that clean water is diverted, as appropriate, from the production area;
5. Prevents direct contact of confined animals with waters of the state;
6. Ensures that chemicals and other contaminants handled on-site are not disposed of in any manure, litter, process wastewater, or stormwater storage or treatment system unless specifically designed to treat such chemicals and other contaminants;
7. Identifies appropriate site-specific conservation practices to be implemented, including, as appropriate, buffers or equivalent practices, to control runoff of pollutants to



waters of the state (these practices shall meet minimum standards set in the USDA-NRCS National Engineering Handbook (May 2014) and/or the USDA-NRCS Agricultural Waste Management Handbook (April 1992)), as follows:

(i) Manure, litter, and process wastewater shall be applied no closer than 100 feet to any down-gradient surface waters, open tile line intake structures, sinkholes, agricultural well heads, or other conduits to surface waters unless:

(I) The AFO substitutes the 100-foot setback with a 35-foot-wide vegetated buffer or by leaving in place a 60-foot natural riparian buffer, where applications of manure, litter, or process wastewater are prohibited; or

(II) The AFO demonstrates that a setback or buffer is not necessary because implementation of alternative conservation practices or field-specific conditions will provide pollutant reductions equivalent to or better than the reductions that would be achieved by the 100-foot setback;

(ii) Manure, litter, and process wastewater shall be applied no closer than 100 feet of any potable well, public or private; and

(iii) AFOs that are located adjacent to exceptional Tennessee waters and outstanding national resource waters (as identified by the Department), shall leave in place a minimum 60-foot natural riparian buffer between the stream and the land application area.

8. Provides for annual manure analysis for nitrogen and phosphorus content, following University of Tennessee Extension guidelines, and soil analysis at a minimum of once every five years for phosphorus content (the results of these analyses are to be used in determining application rates for manure, litter, and other process wastewater);

9. Establishes protocols to land apply manure, litter, or process wastewater in accordance with site-specific nutrient management practices that ensure appropriate agricultural utilization of the nutrients in the manure, litter, or process wastewater.



Application rates for manure, litter, and other process wastewater applied to land under the ownership or operational control of the AFO shall minimize phosphorus and nitrogen transport from the field to surface waters in compliance with technical standards for nutrient management that:

(i) Include a field-specific assessment of the potential for nitrogen and phosphorus transport from the field to surface waters, and address the form, source, amount, timing, and method of application of nutrients on each field to achieve realistic production goals, while minimizing nitrogen and phosphorus movement to surface waters, that employs the Tennessee Phosphorus Index (a tool developed by the University of Tennessee Extension Service and the USDA-NRCS to assess the risk of phosphorus movement from the application area to waters of the state); and

(ii) Include appropriate flexibilities for any AFO to implement nutrient management practices to comply with the technical standards, including consideration of multi-year phosphorus application on fields that do not have a high potential for phosphorus runoff to surface water, phased implementation of phosphorus-based nutrient management, and other components, in consideration of recommendations from the University of Tennessee Extension and as determined appropriate by the Director;

10. Provides for periodic inspection of equipment used for land application of manure, litter, and other process wastewater; and

11. Includes a closure/rehabilitation plan for the waste system storage/treatment structure(s) that meets or exceeds applicable USDA-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.

(b) Nutrient management plan terms.

The terms of the nutrient management plan are the information, protocols, best management practices, and other conditions in the nutrient management plan determined by the Director to be necessary to implement the nutrient management plan. The terms



of the nutrient management plan, with respect to protocols that ensure appropriate agricultural utilization of the nutrients in the manure, litter, or process wastewater, shall include the fields available for land application; field-specific rates of application properly developed through either the linear approach or the narrative approach; and any timing limitations identified in the nutrient management plan concerning land application on the fields available for land application.

1. Linear approach

An approach that expresses rates of application as pounds of nitrogen and phosphorus, according to the following specifications:

(i) The terms include:

(I) Maximum application rates from manure, litter, and process wastewater for each year of permit coverage and for each crop identified in the nutrient management plan, in terms of total nitrogen and phosphorus, in pounds per acre, per year, for each field to be used for land application;

(II) The outcome of the field-specific assessment of the potential for nitrogen and phosphorus transport from each field as described in subpart (a)9.(i) of this paragraph;

(III) The crops to be planted in each field or any other uses of a field such as pasture or fallow fields; the realistic yield goal for each crop or use identified for each field;

(IV) The nitrogen and phosphorus recommendations as recommended by the University of Tennessee Extension for each crop or use identified for each field;

(V) Credits for all residual nitrogen in the field that will be plant-available as recommended by the University of Tennessee Extension;

(VI) Consideration of multi-year phosphorus application in accordance with subpart (a)9.(ii) of this paragraph;



- (VII) An accounting of all other additions of plant-available nitrogen and phosphorus to the field;
- (VIII) The form and source of manure, litter, and process wastewater to be land-applied;
- (IX) The timing and method of land application; and
- (X) The methodology by which the nutrient management plan accounts for the amount of nitrogen and phosphorus in the manure, litter, and process wastewater to be applied as described in part (a)8. of this paragraph.

(ii) Large AFOs that use this approach shall calculate the maximum amount of manure, litter, and process wastewater to be land-applied at least once each year using the results of the most recent representative manure, litter, and process wastewater tests for nitrogen and phosphorus taken within 12 months of the date of land application.

2. Narrative rate approach

An approach that expresses rates of application as a narrative rate of application that results in the amount, in tons or gallons, of manure, litter, and process wastewater to be land-applied, according to the following specifications:

(i) The terms include:

- (I) Maximum amounts of nitrogen and phosphorus derived from all sources of nutrients, for each crop identified in the nutrient management plan, in terms of total nitrogen and phosphorus, in pounds per acre, for each field, and certain factors necessary to determine such amounts;
- (II) The outcome of the field-specific assessment of the potential for nitrogen and phosphorus transport from each field as described in subpart (a)9.(i) of this paragraph;
- (III) The crops to be planted in each field or any other uses such as pasture or fallow fields (including alternative crops identified in subpart (iii) of this part;



(IV) The realistic yield goal for each crop or use identified for each field; and

(V) The nitrogen and phosphorus recommendations as recommended by the University of Tennessee Extension for each crop or use identified for each field.

(ii) The terms include the methodology by which the nutrient management plan accounts for the following factors when calculating the amounts of manure, litter, and process wastewater to be land-applied:

(I) Results of soil tests conducted in accordance with protocols identified in part (a)8. of this paragraph;

(II) Credits for all residual nitrogen in the field that will be plant-available as recommended by the University of Tennessee;

(III) The amount of nitrogen and phosphorus in the manure, litter, and process wastewater to be applied;

(IV) Consideration of multi-year phosphorus application in accordance with subpart (a)9.(ii) of this paragraph;

(V) Accounting for all other additions of plant-available nitrogen and phosphorus to the field;

(VI) The form and source of manure, litter, and process wastewater;

(VII) The timing, except as described in subpart (iv) of this part, and method of land application; and

(VIII) Volatilization of nitrogen and mineralization of organic nitrogen.

(iii) The terms of the nutrient management plan include alternative crops identified in the AFO's nutrient management plan that are not in the planned crop rotation. Where an AFO includes alternative crops in its nutrient management plan, the crops shall be listed by field, in addition to the crops identified in the planned crop rotation for that field, and the nutrient management plan shall include realistic crop yield goals and the



nitrogen and phosphorus recommendations as recommended by the University of Tennessee for each crop. Maximum amounts of nitrogen and phosphorus from all sources of nutrients and the amounts of manure, litter, and process wastewater to be applied shall be determined in accordance with the methodology described in items (ii)(I) through (VIII) of this part.

(iv) For AFOs using this approach, the following projections shall be included in the nutrient management plan submitted to the Director, but are not terms of the nutrient management plan: The AFO's planned crop rotations for each field for the period of permit coverage; the projected amount of manure, litter, or process wastewater to be applied; projected credits for all nitrogen in the field that will be plant-available; consideration of multi-year phosphorus application; accounting for all other additions of plant-available nitrogen and phosphorus to the field; and the predicted form, source, and method of application of manure, litter, and process wastewater for each crop. Timing of application for each field, insofar as it concerns the calculation of rates of application, is not a term of the nutrient management plan.

(v) AFOs that use this approach shall calculate maximum amounts of manure, litter, and process wastewater to be land-applied at least once each year using the methodology required in subpart (ii) of this part before landapplying manure, litter and process wastewater and shall rely on the following data:

(I) A field-specific determination of soil levels of nitrogen and phosphorus, including, for nitrogen, a concurrent determination of nitrogen that will be plant-available consistent with the methodology required by subpart (ii) of this part, and for phosphorus, the results of the most recent soil test conducted in accordance with soil testing requirements approved by the Commissioner; and

(II) The results of the most recent representative manure, litter, and process wastewater tests for nitrogen and phosphorus taken within 12



months of the date of land application, in order to determine the amount of nitrogen and phosphorus in the manure, litter, and process wastewater to be applied.

(c) Changes to a nutrient management plan.

1. Any NPDES permit issued to an AFO shall require the following procedures when an AFO owner or operator makes changes to the AFO's nutrient management plan previously submitted to the Director:

(i) The AFO owner or operator shall provide the Director with the most current version of the AFO's nutrient management plan and identify changes from the previous version, except that the results of calculations made in accordance with the requirements of subparts (b)1.(ii) and (b)2.(v) of this paragraph are not considered to be changes to the nutrient management plan subject to the requirements of this paragraph.

(ii) The Director shall review the revised nutrient management plan to ensure that it meets the requirements of this paragraph and applicable effluent limitations and standards and shall determine whether the changes to the nutrient management plan include revision to the terms of the nutrient management plan as set forth in subparagraph (b) of this paragraph. If the terms of the nutrient management plan are not revised, the Director shall notify the AFO owner or operator and upon such notification the AFO may implement the revised nutrient management plan. If the terms of the nutrient management plan are revised, the Director shall determine whether such changes are substantial changes as described in part 2. of this subparagraph.

(iii) If the Director determines that the changes to the terms of the nutrient management plan are not substantial, the Director shall make the revised nutrient management plan publicly available and include it in the permit record and inform the public of any changes to the terms of the nutrient management plan.



(iv) If the Director determines that the changes to the terms of the nutrient management plan are substantial, the Director shall notify the public and make the proposed changes and the information submitted by the AFO owner or operator available for public review and comment. The process for public notice and participation shall follow the procedures applicable to draft permits set forth in Rule 0400-40-05-.06. The Director shall consider all significant comments received during the comment period and require the AFO owner or operator to further revise the nutrient management plan if necessary. Once the Director approves the revised terms of the nutrient management plan, the Director shall issue a notice of determination that addresses all comments received and notifies the owner or operator and the public of the final decision concerning revisions to the nutrient management plan.

2. Substantial changes to the terms of a nutrient management plan incorporated as terms and conditions of a permit include, but are not limited to:

(i) Addition of new land application areas not previously included in the AFO's nutrient management plan or in the terms of a nutrient management plan incorporated into an existing NPDES permit. If the AFO owner or operator applies manure, litter, or process wastewater on the newly added land application area in accordance with existing field-specific permit terms applicable to the newly added land application area, such addition of new land would be a change to the new AFO owner or operator's nutrient management plan but not a substantial change for purposes of this paragraph;

(ii) Any changes to the field-specific maximum annual rates for land application set in accordance with the linear approach, or to the maximum amounts of nitrogen and phosphorus derived from all sources for each crop set in accordance with the narrative approach;

(iii) Addition of any crop or other uses not included in the terms of the AFO's nutrient management plan and corresponding field-specific rates of application; and



(iv) Changes to site-specific components of the AFO's nutrient management plan, where such changes are likely to increase the risk of nitrogen and phosphorus transport to waters of the state.

3. AFOs covered by state operating permits are subject to the following procedures when the AFO owner or operator makes changes to the AFO's nutrient management plan previously submitted to the Director:

(i) The AFO owner or operator shall provide the Director with the most current version of the AFO's nutrient management plan and identify changes from the previous version.

(ii) The Director shall review the revised nutrient management plan to ensure that it meets the requirements of this paragraph and applicable effluent standards and shall determine whether the changes to the nutrient management plan include revisions to the terms of the nutrient management plan as set forth in subparagraph (b) of this paragraph. The Director shall advise the AFO owner or operator whether the changes meet the requirements of this paragraph and applicable effluent standards. Upon such notification, the AFO owner or operator shall either make further revisions to the nutrient management plan or implement the revised nutrient management plan.

(iii) Operational changes that require nutrient management plan revision, resubmittal, and approval, include:

(I) Additional confinement buildings, settling basins, lagoons, holding ponds, or pits, and other agricultural waste containment/treatment structures or handling systems;

(II) The addition of new fields for land application of manure, or the removal of existing fields;

(III) A substantial increase in the amount of manure produced by the operation such that the current nutrient management plan does not adequately account for the increase;



(IV) Alternative crops that were not mentioned in the previous nutrient management plan; or

(V) Increases in the total amount of nitrogen and phosphorus for each crop for a narrative plan.

(11) Recordkeeping and reporting requirements.

Any NPDES permit issued to an AFO shall include:

(a) A requirement that the permittee shall create, maintain for five years, and make available to the Director, upon request, the following records:

1. Records documenting the implementation and management of the minimum elements described in subparagraph (10)(a) of this rule and all applicable records identified in parts 2. through 18. of this subparagraph;

2. A copy of the AFO's site-specific nutrient management plan;

3. Records documenting the following visual inspections:

(i) Weekly inspections of all stormwater diversion devices, runoff diversion structures, and devices channeling contaminated stormwater to the wastewater and manure storage and containment structure;

(ii) Daily inspections of water lines, including drinking or cooling water lines; and

(iii) Weekly inspections of the manure, litter, and process wastewater impoundments noting the liquid level in the impoundments;

4. Weekly records of the depth of the manure and process wastewater in any open surface liquid impoundment as indicated by the required depth marker that indicates the minimum capacity necessary to contain the runoff and direct precipitation of the 25-year, 24-hour rainfall event. In the case of swine or poultry AFOs that are new sources, the depth marker shall indicate minimum capacity necessary to contain the runoff and direct precipitation associated with the 25-year, 24-hour rainfall event used for sizing the impoundment;

5. Records documenting any corrective actions taken (if deficiencies are not corrected within 30 days of notice of



deficiency, the records shall include an explanation of the factors preventing immediate correction);

6. Records of mortalities management and practices used to comply with the nutrient management plan;

7. Records documenting the current design of any manure or litter storage structures, including volume for solids accumulation, design treatment volume, total design volume, and approximate number of days of storage capacity;

8. Records of the date, time, and estimated volume of any overflow;

9. Expected and actual crop yields;

10. The date(s) manure, litter, or process wastewater is applied to each field;

11. Weather conditions at the time of application and for 24 hours prior to and following application;

12. Test methods used to sample and analyze manure, litter, process wastewater, and soil;

13. Results from manure, litter, process wastewater, and soil sampling;

14. Explanation of the basis for determining manure application rates, as provided in the technical standards established by the University of Tennessee Extension or as otherwise approved by the Director or the Tennessee Department of Agriculture and consistent with applicable state and federal rules;

15. Calculations showing the total nitrogen and phosphorus to be applied to each field, including sources other than manure, litter, or process wastewater;

16. Total amount of nitrogen and phosphorus actually applied to each field, including documentation of calculations for the total amount applied;

17. The method used to apply the manure, litter, or process wastewater; and

18. Date(s) of manure application equipment inspection and calibration.



(b) Recordkeeping for third-party waste transfers.

A requirement that prior to transferring manure, litter, or process wastewater to a third party, all NPDES-permitted AFOs shall provide the recipient of the manure, litter, or process wastewater with the most current nutrient analysis (consistent with 40 CFR Part 412 (2021) and approved by the University of Tennessee Extension). Large NPDES-permitted AFOs shall ensure that the third party signs an agreement for the removal of manure, litter, or process wastewater for all transfers of manure, litter, or process wastewater. All other NPDES-permitted AFOs shall ensure that the third party signs an agreement for the removal of manure, litter, or process wastewater only if the AFO transfers more than 100 tons of manure, litter, or process wastewater. The agreement for the removal of manure, litter, or process wastewater shall be retained for five years and shall include the following information, at a minimum:

1. The name and location of the facility that is exporting manure, litter, or process wastewater;
2. The type and amount of material that is removed from the AFO;
3. The date the material was removed from the AFO;
4. The following best management practice recommendations:
 - (i) The manure, litter, or process wastewater shall be managed to ensure there is no discharge of manure, litter, or process wastewater to surface or groundwater;
 - (ii) When removed from the facility, manure, litter, or process wastewater should be applied directly to the field or stockpiled and covered with plastic or stored in a building;
 - (iii) Manure, litter, or process wastewater shall not be stockpiled near streams, sinkholes, wetlands, or wells;
 - (iv) Fields receiving manure, litter, or process wastewater should be soil tested at least every five years;
 - (v) A manure, litter, or process wastewater nutrient analysis should be used to determine application rates for various crops;
 - (vi) Calibrate spreading equipment and apply manure, litter, or process wastewater uniformly;



(vii) Apply no more nitrogen or phosphorus than can be used by the crop;

(viii) A buffer zone is recommended between the application sites and adjacent streams, lakes, ponds, sinkholes, and wells. The following non-application buffer widths, based on the USDA-NRCS Conservation Practice Standard 590 (January 2013 version, or most recent version), should be used when applicable:

(I) 150 ft. from wells located upslope of the application site;

(II) 300 ft. from wells located downslope of the application site, if conditions warrant application;

(III) 30-100 ft. from waterbodies, depending on the amount and quality of vegetation and slope;

(IV) 300 ft. from all public use areas; and

(V) 300 ft. from all residences other than the third-party recipient's.

(ix) Do not apply manure, litter, or process wastewater when the ground is frozen, flooded, saturated, or on steep slopes subject to flooding, erosion, or rapid runoff;

(x) Cover vehicles hauling manure, litter, or process wastewater on public roads; and

(xi) Keep records of locations where manure, litter, or process wastewater will be land-applied or used as a fertilizer; and

5. A signed certification statement from the recipient of the material from the AFO, including the recipient's name, address, and phone number.

(c) A requirement that NPDES-permitted AFOs submit to the Department, an annual report between January 1 and February 15 that includes:

1. The number and type of animals on site, whether in open confinement or housed under roof;



2. Estimated amount of total manure, litter, and process wastewater generated by the AFO in the previous calendar year (tons or gallons);
3. Estimated amount of total manure, litter, and process wastewater transferred to a third party by the AFO in the previous calendar year (tons or gallons);
4. Total number of acres for land application covered by the nutrient management plan;
5. Total number of acres under control of the AFO that were used for land application of manure, litter, and process wastewater in the previous calendar year;
6. A summary of all manure, litter, and process wastewater discharges to waters of the state from the production area that have occurred in the previous calendar year, including date, time, and approximate volume;
7. A statement indicating whether the current version of the AFO's nutrient management plan was developed or approved by a certified nutrient management planner;
8. The actual crop(s) planted and actual yield(s) for each field;
9. The actual nitrogen and phosphorus content of the manure, litter, and process wastewater;
10. The results of calculations to determine the maximum amount of manure, litter, and process wastewater to be land-applied and the data used in the calculations;
11. The actual amount of manure, litter, and process wastewater applied during the previous 12 months;
12. The results of any soil tests for nitrogen and phosphorus conducted in the previous 12 months; and
13. The amount of any supplemental fertilizer applied during the previous 12 months.

(12) For AFOs with applicable federal effluent guidelines, technology-based effluent limitations and standards in accordance with those guidelines shall be applied.

(13) For AFOs that are not subject to applicable federal effluent guidelines, the production area shall be designed, constructed, operated,



and maintained so that no discharge will occur, except as authorized through the conditions of an NPDES permit.

(14) Permitted facilities placed into operation after April 13, 2006 must be designed, constructed, operated, and maintained in accordance with final design plans and specifications that meet or exceed standards in the USDA-NRCS Agricultural Waste Management Field Handbook (April 1992), the USDA-NRCS National Engineering Handbook (May 2014), or other defensible methodology approved by the Division. Specifically, plans shall contain the following:

(a) 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 USDA-NRCS Conservation Practice Standard 313 (August 2018);

(b) Information to be used in the design of the open manure storage structure including, but not limited to, minimum storage for rainy seasons, minimum capacity for chronic rainfall events, the prohibition of land application to frozen, saturated, or snow-covered ground, the dewatering schedules set in the AFO's Nutrient Management Plan, additional storage capacity for any manure intended to be transferred to another recipient at a later time, and any other factors that would affect the sizing of the open manure storage structure;

(c) The design of the open manure storage structure as determined by the USDA-NRCS's Animal Waste Management (AWM) software (version 2.4). AFOs may use equivalent design software or procedures as approved in writing by the Commissioner;

(d) All inputs used in the open manure storage structure design including actual climate data for the previous 30 years consisting of historical average monthly precipitation and evaporation values, the number and types of animals, anticipated animal sizes or weights, any added water and bedding, any other process wastewater, and the size and condition of outside areas exposed to rainfall and contributing runoff to the open manure storage structure;

(e) The planning minimum period of storage in months including, but not limited to, the factors for designing an open manure storage structure listed in subparagraph (b) of this paragraph.



Alternatively, the AFO may determine the minimum period of storage by specifying times the storage pond will be emptied consistent with the AFO's nutrient management plan; and

(f) 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. The subsurface investigation will include a detailed soils investigation with special attention to the water table depth and seepage potential. The investigation shall evaluate soils to a depth of two feet below the planned bottom grade of the storage structure. Deeper investigations may be required in karst regions. A soils/geologic investigation shall be performed by a soil scientist (as described in Rule 0400-48-01-.18) and qualified geologist. A qualified geologist is defined as an individual who is a Registered Professional Geologist licensed by the State of Tennessee or an individual who meets the requirements for the title of Certified Professional Geologist as defined by the American Institute of Professional Geologists. Unless relevant information is available to the contrary, compliance with this provision during design and construction of the facility will normally demonstrate that the hydrologic connection does not exceed a maximum allowable specific discharge of 0.0028 ft/day (1×10^{-6} cm/sec).

