

**RULES  
OF  
THE TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION  
DIVISION OF WATER RESOURCES**

**CHAPTER 0400-40-06  
STATE OPERATING PERMITS**

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**0400-40-06-.01 PURPOSE.**

State Operating Permits (SOPs) authorize the operation of non-discharging sewerage systems in compliance with permit conditions. SOPs issued pursuant to this chapter impose such conditions, including effluent standards and conditions and terms of periodic review, as are necessary to prevent pollution of waters from the operation of non-discharging wastewater systems, including but not limited to: land application; animal feeding operations; pumping and hauling; collection and conveyance; and non-potable reuse of reclaimed wastewater. SOPs are not required for the use of a septic tank connected only to a subsurface drainfield subject to regulation under Chapter 0400-48-01. SOPs do not authorize discharges to waters or alterations of the properties of waters. In addition to any standards imposed by this chapter, construction of SOP facilities that collect and treat wastewater are governed by Chapter 0400-40-02.

**Authority:** T.C.A. §§ 4-5-201, et seq., and 69-3-101, et seq. **Administrative History:** New rules filed February 14, 2022; effective May 15, 2022.

**0400-40-06-.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:

“Act” or “TWQCA” means the Water Quality Control Act of 1977, T.C.A. Title 69, Chapter 3, Part 1.

“Agricultural reuse for food crops” means the non-potable reuse of reclaimed wastewater to irrigate food crops that are intended for human consumption.

“Agricultural reuse for processing food crops and non-food crops” means the non-potable reuse of reclaimed wastewater to irrigate crops that are processed by humans before consumption.

“Agronomic application rate,” with respect to categories of Urban or Agricultural Reuse, means the application of reclaimed wastewater to meet nutrient or hydraulic uptake needs of food crops, feed crops, fiber crops, cover crops, or vegetation grown on land, the latter category including but not limited to athletic fields and ornamental landscaping. Agronomic application rates vary with the type and density of the crops, the seasonal and ambient weather conditions, shade coverage, and characteristics of the reclaimed wastewater.

(Rule 0400-40-06-.02, continued)

“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.

“Continuous monitoring” means collection of samples using a probe and a recorder with at least one data point per dosing cycle.

“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.

“End user of reclaimed wastewater” means the recipient and user of reclaimed wastewater from a permitted provider at the end of a distribution network who is engaging in beneficial reuse. Any individual who engages in the sale or resale of reclaimed wastewater is not an end user of the reclaimed wastewater.

“Environmental reuse” means the non-potable reuse of reclaimed wastewater that is of such quality that it could be used to create, enhance, sustain, or augment water bodies including wetlands, aquatic habitats, or stream flow.

“Feed crops” means crops produced primarily for consumption by animals.

“Fiber crops” means crops produced primarily for harvesting fibers such as flax or cotton.

“Food crops” means crops produced primarily for consumption by humans. These include, but are not limited to, fruits, vegetables, and tobacco.

“Grab sample” means a single sample collected at a particular time.

“Groundwater recharge for non-potable reuse” means the non-potable reuse of reclaimed wastewater of such quality that it is suitable to recharge aquifers that are not used as potable water sources.

“Irrigation” means the beneficial application of reclaimed wastewater to land or soil to assist with the growing of agricultural crops and maintenance of landscapes during periods of insufficient rainfall.

“Land application area for AFOs” 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.

“Monthly average concentration” means the arithmetic mean of all samples collected in a calendar-month, expressed in units of mass per volume, for any pollutant.

“Non-potable reuse of reclaimed wastewater” means the planned and intentional reuse of reclaimed wastewater that does not involve direct production of potable water.

“NPDES” means National Pollutant Discharge Elimination System.

“Pasture” means the land on which animals feed directly on crops such as legumes, grasses, grain stubble, or clover.

(Rule 0400-40-06-.02, continued)

“Potable reuse of reclaimed wastewater” means the planned augmentation of a drinking water source with reclaimed wastewater.

A “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, or October 1 through December 31.

“Reclaimed wastewater” means wastewater that has been treated to meet minimum criteria with the intent of being used for non-potable purposes in a non-discharging wastewater system.

“Restricted urban reuse” means the non-potable reuse of reclaimed wastewater in municipal or suburban settings that is of such quality that public access is controlled or restricted by physical or institutional barriers, such as fencing, advisory signage, or temporal access restrictions.

“Reuse in impoundments with restricted access” means the non-potable reuse of reclaimed wastewater in an impoundment that is of such quality that bodily contact is restricted.

“Reuse in impoundments with unrestricted access” means the non-potable reuse of reclaimed wastewater in an impoundment that is of such quality that there are no limitations imposed on bodily contact for recreational activities.

“Reuse of reclaimed wastewater” means the application of reclaimed wastewater of sufficient quality to be reused in a non-discharging wastewater system in a manner protective of human health and the environment.

“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.

“STEG” means septic tank effluent gravity.

“STEP” means septic tank effluent pump.

“Surface impoundment” or “impoundment” means a facility or part of a facility that is a natural topographic depression, man-made excavation, or diked area formed primarily of earthen materials (although it may be lined with man-made materials), that is designed to hold an accumulation of liquid wastes or wastes containing free liquids, and that is not an injection well.

“Unrestricted urban reuse” means the non-potable reuse of reclaimed wastewater in municipal or suburban settings that is of such quality that public access is not restricted, such as irrigation for athletic fields, landscaping, or other approved “purple pipe” residential uses.

“Wastewater” means “sewage” as defined in T.C.A. § 69-3-103.

“Wastewater reclamation” means the treatment of wastewater or effluent to produce reclaimed wastewater such that it is acceptable for reuse that would not otherwise occur.

“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.

**Authority:** T.C.A. §§ 4-5-201, et seq., and 69-3-101, et seq. **Administrative History:** New rules filed February 14, 2022; effective May 15, 2022.

**0400-40-06-.03 PERMIT APPLICATION, ISSUANCE.**

- (1) Any person who plans to operate a non-discharging wastewater system, other than an exempt septic system discharging only to a subsurface drain field, shall apply in writing for a state operating permit (SOP) on forms provided by the Commissioner and secure such a permit prior to operation or expiration of an existing permit. The Commissioner may make these application forms available electronically and, if submitted electronically, then that electronic submission shall comply with the requirements of Chapter 0400-01-40. Completed applications shall be submitted no later than 180 days in advance of the date on which a new or expanded activity will begin operation or the date of expiration of an existing permit for an ongoing activity.
- (2) Applicants shall complete and submit standard application forms supplied by the Commissioner together with such engineering reports, plans, and specifications as are required. The Commissioner may subsequently request additional reasonable information as required to make the permit decision. Processing of the application shall not be completed until all requested information has been submitted. Within 30 days of receipt of the application, the Commissioner will notify the applicant of any deficiencies or that the application is complete. This provision does not preclude the Commissioner from later requesting additional information that after the notice of completeness is issued, is determined to be necessary for permit processing.
- (3) Non-discharging large AFOs, as defined by TABLE 0400-40-05-.14.1 of Rule 0400-40-05-.14, that utilize liquid waste management systems, shall seek and obtain coverage under a SOP prior to commencing operation. Other non-discharging AFOs may seek and obtain coverage under a SOP. All AFOs seeking to obtain permit coverage shall submit an application to the Commissioner. All AFOs seeking to obtain permit coverage shall submit a nutrient management plan as outlined in subparagraphs (10)(a) and (b) of Rule 0400-40-05-.14.
- (4) Applications shall be submitted and signed in accordance with the following:
  - (a) For a corporation, by a:
    1. Responsible corporate officer, i.e., a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation;
    2. Manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions that govern the operation of the regulated facility to assure long term environmental compliance with environmental laws and regulations; or
    3. Person in a corporate position to whom signatory authority has been delegated by a corporate officer.
  - (b) For a partnership or sole proprietorship: by a general partner or the proprietor, respectively.
  - (c) For a municipality, state, federal, or other public agency, by a:
    1. Principal executive officer (i.e., the chief executive officer of the agency, or a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency); or
    2. Ranking elected official.

(Rule 0400-40-06-.03, continued)

- (5) The Commissioner will not authorize the construction, installation, or modification of a sewerage system, or part thereof, or any extension or addition thereto, until after the end of the public comment period as outlined in Rule 0400-40-06-.04.
- (6) The Commissioner shall issue permits only to persons as defined in T.C.A. § 69-3-103(27). Private corporations, limited liability companies, or limited liability partnerships must be in good standing with the Tennessee Secretary of State to be eligible for permit coverage. Out-of-state corporations, limited liability companies, or limited liability partnerships must be registered with the Tennessee Secretary of State to be eligible for permit coverage.
- (7) The Commissioner shall not issue a permit or a renewal of a permit to an applicant unless all fees required by T.C.A. Title 68, Chapter 203 have been paid in full.
- (8) Public sewerage system applicants shall be a municipality, a public utility, a wastewater authority, a privately owned public utility (having a Certificate of Convenience and Necessity from the Tennessee Public Utility Commission), or another public agency.
- (9) This chapter requires the submission of forms developed by the Commissioner to comply with certain requirements, including, but not limited to, making reports, submitting monitoring results, and applying for permits. The Commissioner may make these forms available electronically and, if submitted electronically, then that electronic submission shall comply with the requirements of Chapter 0400-01-40.

**Authority:** T.C.A. §§ 4-5-201, et seq., and 69-3-101, et seq. **Administrative History:** New rules filed February 14, 2022; effective May 15, 2022.

#### **0400-40-06-.04 NOTICE AND PUBLIC PARTICIPATION.**

- (1) Each completed permit application shall be evaluated and a tentative determination of whether to issue or deny a permit shall be made. If a tentative determination is made to issue a permit, then a draft permit shall be prepared for public notice that includes the proposed conditions.
- (2) For each application for which a tentative determination is made to issue a permit, the Commissioner shall prepare a rationale to be published with the draft permit that includes or considers as appropriate:
  - (a) The type and quantity of wastes, fluids, or pollutants that are proposed to be or are being treated, conveyed, pumped and hauled, land applied, or used;
  - (b) A brief summary of the basis for the draft permit conditions;
  - (c) The location of the activity or activities described in the application;
  - (d) The tentative determination regarding the proposed activity; and
  - (e) Name, telephone number, and electronic mail address of a person to contact for additional information.
- (3) No public notice is required:
  - (a) When a request for permit modification, revocation and reissuance, or termination is denied based on the Commissioner's determination that the request was not justified (written notice of that denial shall be given to the requester and to the permittee); or

(Rule 0400-40-06-.04, continued)

- (b) For minor permit modifications, which include corrections of typographical errors, requiring more frequent monitoring or reporting, changing an interim compliance date, or allowing a change of ownership.
- (4) Public notices may describe more than one permit or permit actions.
- (5) Public notice of a draft permit (including a notice of intent to deny a permit application for a new or expanded activity) required under this rule shall allow at least 30 days for public comment.
- (6) Public notice of a public hearing shall be given at least 30 days before the hearing. Public notice of the hearing may be given at the same time as public notice of the draft permit, and the two notices may be combined.
- (7) To inform interested and potentially interested persons of the proposed activity and of the tentative determinations regarding it, public notice shall be circulated within the geographical area of the proposed activity by the following means:
  - (a) By mailing (either electronically or physically) a copy of the notice to the following persons:
    - 1. The applicant;
    - 2. Any other agency the Commissioner knows has issued, or is required to issue, other permits for the same facility or activity;
    - 3. Persons on a mailing list for permit actions developed by:
      - (i) Including those who request in writing to be on the list; and
      - (ii) Notifying the public of the opportunity to be put on the mailing list through periodic publication in the public press, newsletters, environmental bulletins, or state law journals. The Commissioner may update the mailing list from time to time by requesting written indication of continued interest from those listed. The Commissioner may delete from the list the name of any person who fails to respond to such a request;
    - 4. To any unit of local government having jurisdiction over the area where the facility is proposed to be located; and
    - 5. To each state agency having any authority under state law with respect to the construction or operation of such facility.
  - (b) The applicant shall post a sign within view of a public road in the vicinity of the proposed SOP activity as specified by the Commissioner. The sign shall contain those provisions as specified by the Commissioner. The sign shall be of such size that it is readily visible from the public road. Also, the sign shall be maintained for at least 30 days following distribution of the approved public notice.
  - (c) If determined necessary by the Commissioner, any other method reasonably calculated to give actual notice of the action in question to the persons potentially affected by it, including press releases, website postings, or any other forum or medium to elicit public participation, may be utilized.
- (8) Public notice of applications shall include the following:

(Rule 0400-40-06-.04, continued)

- (a) Name and address of the Division of Water Resources and the phone number and electronic mail address of the assigned permit writer;
  - (b) Name and location address of each applicant;
  - (c) Brief description of each applicant's wastewater activities or operations;
  - (d) Name of any surface waters adjacent to, or within 0.25 miles of, the proposed activity;
  - (e) A statement of the tentative determination to issue or deny a permit for the activity described in the application;
  - (f) A brief description of the procedures for the formulation of final determinations, including the minimum 30-day comment period required by this rule and any other means by which interested persons may influence or comment upon those determinations;
  - (g) Instructions for finding additional information online;
  - (h) Address and phone number of the premises at which interested persons may obtain further information, request a copy of the draft permit, request a copy of the rationale, and inspect and copy forms and related documents; and
  - (i) Any other information that the Commissioner deems necessary.
- (9) Interested persons may submit written comments on the tentative determinations within either 30 days of public notice or such greater period as the Commissioner allows in writing. All written comments submitted shall be retained and considered in the final determination.
- (10) Interested persons may request in writing that the Commissioner hold a public hearing on any application. The request shall be filed as soon as practicable within the period allowed for public comment and shall indicate the interest of the party filing it and the water quality reasons why a hearing is warranted. If there is a significant public interest in having a hearing to address water quality concerns or other requirements of the Act, the Commissioner shall hold a hearing in the geographical area of the proposed activity. Instances of doubt should be resolved in favor of holding the hearing.
- (11) Special provisions regarding public notices for public hearings.
- (a) In addition to the public notice procedures of paragraph (7) of this rule, notice of public hearing shall be sent to all persons who received a copy of the notice or rationale for the application, any person who submitted comments on the draft permit action, all persons who requested the public hearing, and any person who specifically requests a copy of the notice of hearing.
  - (b) Each notice of a public hearing shall include at least the following contents:
    - 1. Name and address of the Division of Water Resources and the phone number and electronic mail address of the assigned permit writer;
    - 2. Name and address of each applicant whose application will be considered at the hearing;
    - 3. Name of, and approximate distance to, the nearest stream;
    - 4. A brief reference to the public notice issued for each application, including identification number and date of issuance;

(Rule 0400-40-06-.04, continued)

5. Information regarding the time and location for the hearing;
6. The purpose of the hearing;
7. A concise statement of the issues raised by the persons requesting the hearing;
8. Address and phone number of premises at which interested persons may obtain further information, request a copy of each draft permit, request a copy of each fact sheet, and inspect and copy forms and related documents;
9. A brief description of the nature of the hearing, including the rules and procedures to be followed; and
10. Any other information deemed necessary by the Commissioner.

**Authority:** T.C.A. §§ 4-5-201, et seq., and 69-3-101, et seq. **Administrative History:** New rules filed February 14, 2022; effective May 15, 2022.

**0400-40-06-.05 GENERAL TERMS AND CONDITIONS.**

- (1) When a permit is granted, the permit shall be subject to the provisions of the Act, these rules, and any special terms or conditions the Commissioner determines are necessary to fulfill the purposes, or enforce the provisions, of the Act. The Commissioner may impose conditions concerning the quality of treated wastewater other than those specified herein as needed based on the quality of the raw wastewater.
- (2) Permits shall impose monitoring, recording, reporting, and inspection requirements as determined necessary by the Commissioner to assure adequate treatment of wastewater and proper operation of the sewerage system to meet the requirements of the Act and of this chapter. All monitoring conducted pursuant to permits issued under this chapter shall be representative of the wastewater being sampled.
- (3) Permits may require best management practices to carry out the purposes and intent of the Act.
- (4) The following terms and conditions shall apply to all SOPs:
  - (a) The standard conditions established by paragraph (2) of Rule 0400-40-05-.07, as applicable.
  - (b) There shall be no discharge to any surface waters or to any location where the discharge is likely to enter surface waters, except as separately authorized by an NPDES permit.
  - (c) There shall be no discharge of wastewater to groundwater, except as separately authorized by an underground injection control permit.
  - (d) The sewerage system shall be operated in a manner preventing the creation of a health hazard or a nuisance.
  - (e) Nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance. Notwithstanding this permit, the permittee shall remain liable for any damages sustained by the State of Tennessee, including but not limited to fish kills and losses of aquatic life and/or wildlife, as a result of the discharge of wastewater to any surface or subsurface waters.



(Rule 0400-40-06-.05, continued)

- (f) Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state or federal law.
- (g) The permittee may not add wasteloads to the permitted system in a quantity or quality not currently permitted without prior notice to, and written approval from, the Commissioner.
- (h) The permittee shall own the sewerage system, including treatment works, collection systems, and land application areas, including any parts thereof and extensions thereto (except as provided in paragraph (2) of Rule 0400-40-06-.09), as applicable. A recorded perpetual easement in a form approved by the Commissioner may be provided in lieu of fee title. Evidence of such ownership or access rights must be provided to, and approved by, the Commissioner prior to commencement of operation. This subparagraph does not apply to land application areas for AFOs.

**Authority:** T.C.A. §§ 4-5-201, et seq., and 69-3-101, et seq. **Administrative History:** New rules filed February 14, 2022; effective May 15, 2022.

**0400-40-06-.06 RESERVED.**

**0400-40-06-.07 ANIMAL FEEDING OPERATIONS.**

In addition to the general conditions identified in Rule 0400-40-06-.05, the following special conditions apply to permits authorizing the operation of wastewater systems for animal feeding operations:

- (1) The permittee shall develop, submit, obtain the Commissioner's approval for, and keep on-site a current site-specific nutrient management plan consistent with the requirements of subparagraphs (10)(a) and (b) of Rule 0400-40-05-.14.
- (2) When the AFO owner or operator makes changes to the AFO's nutrient management plan previously submitted to the Commissioner:
  - (a) The AFO owner or operator shall provide the Commissioner with the most current version of the AFO's nutrient management plan and identify changes from the previous version.
  - (b) The Commissioner shall review the revised nutrient management plan to ensure that it meets the requirements of this paragraph and any applicable 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 (10)(b) of Rule 0400-40-05-.14. The Commissioner shall advise the AFO owner or operator whether the changes meet the requirements of subparagraphs (10)(a) and (b) of Rule 0400-40-05-.14 and applicable 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.
  - (c) Operational changes that require nutrient management plan revision, resubmittal, and Commissioner approval include:
    - 1. The addition of confinement buildings, settling basins, lagoons, holding ponds, holding pits, or other agricultural waste containment/treatment structures or handling systems;
    - 2. The addition of new land application areas for AFOs, or the removal of existing land application areas for AFOs;

(Rule 0400-40-06-.07, continued)

3. 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;
  4. Utilization of alternative crops that were not mentioned in the previous nutrient management plan; and
  5. Increases in field-specific annual land application rates for a linear plan, or increases in the total amount of nitrogen and phosphorus for each crop for a narrative plan.
- (3) 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 Commissioner. At a minimum, such plans shall include the following:
- (a) Any new or additional confinement buildings, waste/wastewater handling systems, waste/wastewater transport structures, waste/wastewater treatment structures, settling basins, lagoons, holding ponds, sumps, 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 most current version of 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 planned 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 owner or operator may determine the minimum period of storage by specifying times the storage pond will be emptied consistent with the AFO's Nutrient Management Plan.
  - (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

(Rule 0400-40-06-.07, continued)

0400-48-01-.18 and a qualified geologist. A qualified geologist 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 subparagraph during design and construction of the facility will normally demonstrate that the hydrologic connection does not exceed a maximum allowable hydraulic conductivity of 0.0028 ft/day ( $1 \times 10^{-6}$  cm/sec).

**Authority:** T.C.A. §§ 4-5-201, et seq., and 69-3-101, et seq. **Administrative History:** New rules filed February 14, 2022; effective May 15, 2022.

**0400-40-06-.08 RESERVED.**

**0400-40-06-.09 COLLECTION SYSTEMS.**

- (1) Collection system components of a sewerage system that are designed to collect, treat, or convey sewage to a treatment process shall be designed in accordance with accepted engineering practice as prescribed in Chapter 0400-40-02.
- (2) Low pressure pumps, low pressure tanks, septic tank effluent pumps (STEP), STEP tanks, and septic tank effluent gravity (STEG) tanks are integral to the treatment and conveyance of sewage in a low-pressure system design, and shall be owned or under control of the municipality, other body of government, public utility district, or a privately owned public utility demonstrating lawful jurisdiction over the service area.
- (3) Except as provided in paragraph (2) of this rule, all collection system components regulated by this chapter shall be owned by a municipality, other body of government, public utility district, or a privately owned public utility demonstrating lawful jurisdiction over the service area. In limited circumstances, a corporation with a demonstrated capacity to provide the managerial and operational resources necessary to maintain its sewerage system may be permitted to operate a collection system to support a business activity (e.g., a resort).

**Authority:** T.C.A. §§ 4-5-201, et seq., and 69-3-101, et seq. **Administrative History:** New rules filed February 14, 2022; effective May 15, 2022.

**0400-40-06-.10 NON-POTABLE REUSE.**

- (1) Scope.
  - (a) T.C.A. § 69-3-108(e) requires applicants for a new or expanded wastewater discharge to surface waters to consider alternatives to discharge, including land application and beneficial reuse of treated wastewater. This rule governs non-potable reuse of reclaimed wastewater, which may be authorized in a stand-alone SOP, an amendment to an existing SOP, or in an NPDES permit. Non-potable reuse is a conservation activity that replaces the use of more highly treated water, especially potable drinking water, with wastewater treated to a lesser, but sufficient, degree for safe and efficacious reuse. Reclaimed wastewater reused for irrigation shall not be applied in excess of the evaporation rate plus the uptake rate of vegetation in the immediate distribution area to ensure there is no unpermitted discharge. Reclaimed wastewater reused as flushing water in residential neighborhoods shall be provided in distribution systems separate from those for potable water and returned to the appropriate wastewater collection system.
  - (b) The following activities do not constitute reuse of reclaimed wastewater within the scope of this rule:

(Rule 0400-40-06-.10, continued)

1. Land application that uses the soil as a means of additional treatment of the wastewater produced by a treatment system authorized pursuant to this chapter;
  2. Reclamation and reuse of harvested rainwater or stormwater;
  3. Reclaimed wastewater produced and utilized on-site by the same treatment system (e.g., wastewater treatment plant-water system);
  4. Industrial effluent created prior to final treatment and used for water re-circulation for step-washing or other processes, or reuse systems located on the same property as the industrial facility;
  5. Potable reuse of reclaimed wastewater;
  6. The reuse of reclaimed wastewater to fill residential or public swimming pools, hot tubs, wading pools, or splash pads;
  7. The reuse of reclaimed wastewater for food preparation or incorporation as an ingredient in food or beverages for human consumption;
  8. The resale or delivery of reclaimed wastewater to another entity without initial prior approval from the Commissioner by modification of the NPDES permit or SOP authorizing reclaimed water sales, and the subsequent contracting with other end-users without execution of the approved permit;
  9. Reuse in impoundments with restricted access or with unrestricted access, environmental reuse, and groundwater recharge for non-potable reuse. Impoundments intended for temporary storage of reclaimed water as part of the delivery system are not subject to regulation under this rule; and
  10. Agricultural reuse for food crops or for processed food crops and non-food crops.
- (c) Excess utilization of reclaimed wastewater resulting in ponding, a nuisance to adjacent properties, or discharge to waters of the state is prohibited.

(2) Application and Review.

(a) Engineering Reports, Plans and Specifications.

An applicant seeking authorization for the new or expanded reuse of reclaimed wastewater shall comply with the requirements of Chapter 0400-40-02 for submission and fee requirements. The permittee shall generate standard specifications, submit proposed standard specifications to the Commissioner for approval, and use the approved standard specifications to design and construct its reclaimed wastewater distribution system. In addition, the following minimum design requirements apply:

1. Any pipe conveying reclaimed wastewater for reuse must be clearly distinguished from potable water distribution systems, wastewater collection systems, and stormwater conveyance systems. The use of magenta, "purple pipe," or similar painting scheme of fittings, valves, hydrants, and other appurtenances is an acceptable method, but other methods may be used if approved by the Commissioner. It is the responsibility of the utility delivering reclaimed water to ensure affected persons are aware of the system distinctions.
2. Reclaimed and potable water systems should be located at least 10 feet horizontally, or at least 18 inches vertically, apart from each other if practicable.

(Rule 0400-40-06-.10, continued)

However, if reclaimed wastewater and potable water systems are located within 10 feet horizontally and 18 inches vertically of each other, the non-potable reclaimed wastewater system shall be treated as if it were conveying wastewater that does not meet the treatment requirements of subparagraph (3)(c) of this rule.

(b) Reclaimed Wastewater Management Plan.

An applicant seeking authorization for the new or expanded reuse of reclaimed wastewater shall submit a Reclaimed Wastewater Management Plan (RWMP) with its permit application. An applicant for renewal of a permit for reuse of reclaimed wastewater shall submit an updated RWMP if there is a material change in end user requirements from the prior submission. Material changes include changes to water quality, delivery pressure, or delivery location, and whenever the end user becomes a purveyor of reclaimed wastewater. At a minimum, the RWMP shall address:

1. The proposed treatment for reclaimed wastewater and the proposed treatment for wastewater to be treated under an NPDES permit or land application permit;
2. Storage and distribution of the reclaimed wastewater for reuse;
3. Schematic process flow diagrams and map of service areas;
4. Processes for approval of system expansion;
5. Procedures to meter reclaimed wastewater for reuse delivered to each end user;
6. Procedures for monitoring and reporting end user compliance;
7. Components of an education program for end users to contribute to the safe use of the system as well as program requirements to meet cross-connection and backflow prevention requirements;
8. Contingency plan for the disposition of treated wastewater in the event that reuse opportunities are not available at some point in the future; and
9. Standard specifications and plans for the reclaimed wastewater distribution system.

(c) End User Service Agreements.

The application shall include the proposed form of end user service agreements between the provider of reclaimed wastewater for reuse and the end user for each metered recipient. The end user service agreement shall establish:

1. End user control over rates of delivery of reclaimed wastewater for reuse, including the minimum and maximum delivery rates and any applicable conditions for determining such rates;
2. Standards of water quality for the reclaimed wastewater to be delivered to the end user, including the monitoring location and the frequency of sampling and analysis;
3. Acknowledgment by the end user of its responsibilities with respect to the appropriate and legal use of the reclaimed wastewater;
4. Service agreement termination provisions; and

(Rule 0400-40-06-.10, continued)

5. If an end user becomes a provider of reclaimed water to a follow-on end user, the first end user must follow all provisions of this rule as a purveyor of reclaimed water, including but not limited to obtaining an SOP, submission of the RWMP, and issuing follow-on end user service agreements between the end user and the customer.

## (d) Demonstrated Availability of Alternatives to Reuse.

1. Only demonstrated, consistent, year-round reuse demands can be counted toward wasteload commitments to reduce the amount of wastewater subject to discharge or land application permits. Only those reuse demands satisfying the reclaimed water purveyor's requirements and under its ownership, or subject to a long-term contract that equals or exceeds the permit term, may be considered as meeting wasteload commitments. The Commissioner may require documentation of five years of demonstrated year-round irrigation to demonstrate consistent reuse demands.
2. New or expanded reuse of reclaimed wastewater will not be permitted unless the applicant demonstrates that sufficient alternatives are available in case the permitted reuse activity becomes unavailable during the permit term. Wasteload commitments based on reuse shall not exceed 25% of the total wasteload commitments, unless a contingency plan has been approved by the Commissioner to adequately address wastewater disposal needs in case the reuse option is not available in the future. Such alternative plans include, but are not limited to, land application permitted by a SOP and/or an NPDES-permitted discharge to surface waters. Conservation measures may be used on a temporary basis until an alternative can be implemented.

## (3) Special Conditions for Reuse of Reclaimed Wastewater.

- (a) The reclaimed wastewater for reuse must be fit for use by the end user, as defined by the end user service agreement.
- (b) The permittee shall implement the Commissioner-approved RWMP. If there are any material changes in end user requirements during the permit term, the permittee shall update the RWMP and submit it to the Division for review. Upon approval, the permittee shall implement the updated RWMP.
- (c) Notwithstanding any less stringent provisions established in the end user service agreement, the permittee shall comply with the following minimum standards and monitoring frequency:

	Unrestricted Urban Reuse		Restricted Urban Reuse	
Parameter	Daily Limit	Monitoring Frequency See Note 1	Daily Limit	Monitoring Frequency See Note 1
pH	6.0-9.0	Weekly See Note 2	6.0-9.0	Weekly See Note 2
CBOD <sub>5</sub> or NH <sub>3</sub> -N	10 mg/L CBOD <sub>5</sub> or 5 mg/L NH <sub>3</sub> -N	Weekly See Note 2	30 mg/L CBOD <sub>5</sub> or 10 mg/L NH <sub>3</sub> -N	Weekly See Note 2
NTU or TSS	5 NTU or 5 mg/L TSS	Continuous Daily See Note 2	30 mg/L TSS	Weekly See Note 2

(Rule 0400-40-06-.10, continued)

E. coli	23 cfu/100 mL	See Note 3	200 cfu/100 mL	See Note 3
Chlorine residual	Minimum of 1 mg/L	See Note 3	Minimum of 1 mg/L	See Note 3

Note 1: The monitoring frequency may be increased due to special circumstances in the NPDES permit or SOP, as agreed upon in the end user service agreement, or as agreed by the reclaimed wastewater provider.

Note 2: pH, CBOD5/NH3-N, NTU/TSS values shall be measured at the effluent sampling point of the pump station into the reclaimed water distribution system or as otherwise indicated in the SOP or NPDES permit.

Note 3: Chlorine residual limits apply only upon failure to comply with E. coli limits more than 10% of the time for the previous month after there is a demonstration that the system can meet the delivery standards. The minimum chlorine residual and E. coli shall be measured at the point of release from the reclamation system (i.e., the delivery meter) to ensure it is maintained within the distribution system. Chlorine and E. coli minimum frequency of measurement is based on weekly applications the previous month, as follows:

<u>Weekly application volume</u>	<u>Required measurement frequency</u>
<= 100,000 gal per week	Once per week when activated
>= 100,000 gal per week	Twice per week when activated
>= 1,000,000 gal per week	Daily when activated

(d) Monitoring and Reporting.

1. Monthly Operating Reports.

The permittee shall submit electronic monthly operating reports no later than the fifteenth day of the following month, including:

- (i) Results for all parameters per subparagraph (3)(c) of this rule;
- (ii) The volume of reclaimed wastewater delivered to each end user, including the overall total volume of reclaimed wastewater reused by the permittee; and
- (iii) Any discharges or releases of reclaimed wastewater from the transmission system including date, location, estimated volume, and response actions.

2. The permittee shall report to the Division of Water Resources whenever it becomes aware of an end user in violation of the end user agreement.

**Authority:** T.C.A. §§ 4-5-201, et seq., and 69-3-101, et seq. **Administrative History:** New rules filed February 14, 2022; effective May 15, 2022.

**0400-40-06-.11 BONDS.**

- (1) Except as provided in paragraph (2) of this rule, no person shall construct, operate, or hold out to the public as proposing to construct or operate a sewerage system unless such person first provides a bond or other financial security established by the Commissioner in accordance with the provisions of this rule.
- (2) The requirements of this rule do not apply to the following:
  - (a) Facilities owned or operated by a governmental entity or agency;

(Rule 0400-40-06-.11, continued)

- (b) Facilities in operation prior to May 25, 1984; or
  - (c) In accordance with T.C.A. § 65-4-201(e)(1), facilities that are bonded as required by Rule 1220-04-13-.07.
- (3) Performance security amounts pursuant to T.C.A. § 69-3-122 shall be established by the Commissioner primarily based on the ability of a sewerage system to control the flow of sewage in the event of sewerage system failure. If the Commissioner determines that the sewerage system is capable of ceasing production or altering its business activity to prevent inadequate treatment of sewage, then the amount of the bond or financial security may be zero dollars. If a sewerage system provides sewerage treatment service to residential units or to other persons (including businesses) via lease or other contract agreement, then the security shall be set at \$75,000.00 unless the sewerage system owner provides sufficient documentation of a basis for reducing the amount to the Commissioner. Acceptable bases for reducing the amount include the cost of installing alternatives that provide treatment or lawful ability to convey sewage to another sewerage treatment system.
- (4) For new permits, evidence that an acceptable security can be provided by the person who will own the assets during the permit term shall be provided to the Commissioner prior to permit issuance. The permittee shall provide acceptable security to the Commissioner prior to commencing operation pursuant to the permit.
- (5) For reissued permits or for permits modified to reflect new ownership of the assets, the permittee shall provide an acceptable security to the Commissioner prior to issuance or transfer of the permit.

**Authority:** T.C.A. §§ 4-5-201, et seq., and 69-3-101, et seq. **Administrative History:** New rules filed February 14, 2022; effective May 15, 2022.

#### **0400-40-06-.12 DURATION AND REISSUANCE OF PERMITS.**

- (1) Each permit shall have a fixed term not to exceed five years. The expiration date shall be stated in the permit.
- (2) Any permittee who wishes to continue to operate after the expiration date of the permit shall apply for reissuance in accordance with the provisions of Rule 0400-40-06-.03. Timely receipt of a complete application for an SOP is necessary for permit continuance. However, the Commissioner, at the Commissioner's discretion, may accept alternative submittal materials.
- (3) In determining whether to reissue a permit, the Commissioner shall review the permit and other available information to ensure that:
  - (a) The permittee is in compliance with or has substantially complied with all terms, conditions, requirements, and schedules of compliance of the expiring or expired permit;
  - (b) The Commissioner has up-to-date information on the permittee's production levels, permittee's waste treatment practices, nature, contents, and frequency of permittee's permitted activities, pursuant to monitoring records and reports submitted to the Commissioner by the permittee; and
  - (c) The activity is consistent with applicable permit requirements.

**Authority:** T.C.A. §§ 4-5-201, et seq., and 69-3-101, et seq. **Administrative History:** New rules filed February 14, 2022; effective May 15, 2022.



**0400-40-06-.13 APPEALS.**

- (1) Permittees, applicants for permits, and aggrieved persons meeting the criteria of paragraph (3) of this rule who disagree with the denial, terms, or conditions of a permit may seek review of the Commissioner's decision pursuant to T.C.A. §§ 69-3-105(i) and 69-3-110.
- (2) All petitioners shall specify the basis for their appeal and state a claim for relief based on an alleged inconsistency with the Act or the rules promulgated thereunder. Permittees and applicants for permits shall specify what terms or conditions they are appealing in their petition. Only those terms or conditions specified in the petition will be considered subject to appeal. For permit modifications, only those terms that were the subject of the modification may be appealed. Aggrieved persons shall specify facts sufficient to establish that they have satisfied the criteria of paragraph (3) of this rule and otherwise have standing to appeal.
- (3) To be entitled to a review of the Commissioner's permit decision, aggrieved persons shall have:
  - (a) Submitted a written comment during the public comment period on the permit;
  - (b) Given testimony at a formal public hearing on the permit; or
  - (c) Attended a public hearing as evidenced by completion of a Department of Environment and Conservation Record of Attendance Card or other method as determined by the Commissioner.
- (4) The basis for the appeal for aggrieved persons may only include issues that:
  - (a) Were provided to the Commissioner in writing during the public comment period;
  - (b) Were provided in testimony at a formal public hearing on the permit; or
  - (c) Arise from any material change to conditions in the final permit from those in the draft, unless the material change has been subject to additional opportunity for public comment.
- (5) All petitions for permit appeal shall be filed with the Board of Water Quality, Oil, and Gas within 30 days after the date that public notice of the permit issuance, denial, or modification is given by way of posting the notice on the Division's website.

**Authority:** T.C.A. §§ 4-5-201, et seq., and 69-3-101, et seq. **Administrative History:** New rules filed February 14, 2022; effective May 15, 2022.