

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

**CHAPTER 0400-46-01  
PRIORITY RANKING SYSTEM**

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**0400-46-01-.01 PRIORITY RANKING SYSTEM: GENERAL.**

(1) General

(a) Introduction and Purpose

This rule provides definitions of terms, general standards and procedures, and overview information applicable to these rules.

The purpose of these rules is to set forth criteria and procedures for developing and maintaining a Priority Ranking System and List for the financing of wastewater treatment works and wastewater facilities. The Priority Ranking System, as described in this rule, is the basis of eligibility determinations and potential allocations of financial assistance from the Department of Environment and Conservation. Pursuant to T.C.A. Title 68, Chapter 221, Parts 8 and 10, the State of Tennessee is authorized to provide financial assistance to local governments for the construction of wastewater treatment works and wastewater facilities identified on the Department's Project Priority List. Each project's Priority Rank is generated from the Project Criteria Points and the Priority Point Value (PPV) formula according to these rules. A potential applicant's project will be placed on the Project Priority List following its evaluation and the assignment of a Priority Rank. The process of being placed on the Project Priority List may be initiated either by the Department or by written request from the potential applicant. The Department will maintain the Project Priority List.

(b) Use of Number and Gender

As used in these rules:

1. Words in the masculine gender also include the feminine and neuter genders; and
2. Words in the singular also include the plural; and
3. Words in the plural include the singular.

(c) Rule Structure

These rules are organized, numbered, and referenced according to the following outline form:

- (1) paragraph

(Rule 0400-46-01-.01, continued)

(a) subparagraph

1. part

(i) subpart

(l) item

I. subitem

A. Section

(A) subsection

## (2) Definitions and References

When used in these rules, the following terms have the meanings given below unless otherwise specified:

(a) **Collector Sewer.** The common lateral sewers within a publicly owned treatment system that are primarily installed to receive wastewater directly from facilities that convey wastewater from individual systems or from private property. This term also includes service connections for those facilities such as the following:

1. Crossover sewers that connect more than one property on one side of a major street, road, or highway to a lateral sewer on the other side when they are more cost effective than parallel sewers; and
2. Pumping units and pressurized lines serving individual structures or groups of structures when such units are cost effective and are owned and maintained by the municipality or utility district.

This definition excludes all facilities that convey wastewater from individual structures or from private property to the public lateral sewer.

(b) **Combined Sewer Overflow (CSO).** The overflow discharge from a sewer line that is designed as a sanitary sewer and a storm sewer.

(c) **Conventional Pollutants.** The conventional pollutants in wastewater effluent are 5-day biochemical oxygen demand (BOD<sub>5</sub>) and/or 5-day carbonaceous biochemical oxygen demand (CBOD<sub>5</sub>), ammonia nitrogen (NH<sub>3</sub>-N) and/or total nitrogen (N-Total), phosphorus (P), dissolved oxygen (DO), fecal coliform and/or E. coli, total suspended solids (TSS), settleable solids (SS), and pH.

(d) **Effluent Trading Projects.** Effluent or water quality trading is an innovative approach to achieve water quality goals more efficiently. Trading is based on the fact that sources in a watershed can face very different costs to control the same pollutant. Trading programs allow facilities facing higher pollution control costs to meet their regulatory obligations by purchasing environmentally equivalent or superior pollution reductions from another source at lower cost, thus achieving the same water quality improvement at lower overall cost.

(e) **Infiltration/Inflow (I/I) Correction.** Procedures to reduce or eliminate infiltration/inflows that do not involve extensive excavation and/or replacement, including, but not limited to, the following:

(Rule 0400-46-01-.01, continued)

1. Pressure testing and sealing procedures;
  2. Limited excavation and replacement where severe infiltration/inflow problems have been documented and can be corrected. Examples of limited excavation and replacement are the replacement or repair of manhole covers, the repair of crushed pipe within an area of temporary or permanent groundwater, or the replacement or repair of a sewer segment beneath a waterway; and
  3. Trenchless technologies such as sliplining, pipe bursting, cured-in-place pipe, etc.
- (f) Interceptor Sewer (Interceptors). A sewer that is designed for one or more of the following purposes:
1. To intercept wastewater from a final point in a collector sewer and convey the wastewater directly to a treatment facility or another interceptor;
  2. To replace an existing wastewater treatment facility and transport the wastewater to an adjoining collector sewer or interceptor sewer for conveyance to a treatment plant;
  3. To transport wastewater from one or more municipal collector sewers to another municipality or to a regional plant for treatment; or
  4. To intercept an existing major discharge of a raw or inadequately treated wastewater for transport directly to another interceptor or a treatment plant.
- (g) Local Government. A county, incorporated town or city, metropolitan government, water and/or wastewater authority, or state agency that has authority to administer a wastewater facility, or any combination of two or more of the foregoing acting jointly to construct a wastewater facility. "Local government" shall also mean any publicly-owned utility district existing on July 1, 1984, or if created after that date, any publicly-owned utility district operating a wastewater facility with at least 500 customer connections.
- (h) Major Sewer Rehabilitation. Construction that involves the removal and replacement of the existing pipes or manholes. This definition is considered applicable for this chapter under one or more of the following conditions:
1. In locations where pipes or manholes have lost their structural integrity, e.g., pipes or manholes are collapsed, broken, or badly deteriorated and cracked;
  2. In cases where pipe size enlargement, change in grade, and/or line realignment are needed in addition to pipe deficiency corrections; or
  3. In cases where damages to the existing pipes or manholes have been attributed to corrosion, soil movement, an increasing traffic load, or other similar factors, and it is desirable to prevent the recurrence of these damages by replacing the existing structures with structures of better quality and greater strength.
- (i) National Pollutant Discharge Elimination System (NPDES) Permit. A permit issued by the Tennessee Department of Environment and Conservation, Division of Water Resources, to discharge treated wastewater into a body of water.

(Rule 0400-46-01-.01, continued)

- (j) Nonpoint Source (NPS) Pollution. Pollution occurring when precipitation moves over and through the ground, picking up and carrying away pollutants, and depositing them into waters of the state.
- (k) Permit Limits. Limitations for pollutants discharged from WWTPs that are identified in an authorization, license, or equivalent control document issued by the Division of Water Resources that implements the requirements of the Tennessee Water Quality Control Act.
- (l) Planning/Design. Facilities planning consists of those necessary plans and studies directly relating to existing and future conditions and effects of wastewater facilities or treatment works as outlined in the application requirements of Rule 0400-46-06-.06. Design consists of creating those necessary bid/contract documents, plans, and specifications for the construction of wastewater facilities or treatment works consistent with the approved facilities plan and necessary to construct the proposed wastewater facilities.
- (m) Pump Station/Force Main. A pump station is a mechanical device that raises and transfers wastewater. A force main is a pipe conveyance system for wastewater that is under hydraulic pressure due to energy imparted by a pump.
- (n) Refinancing. A project previously constructed for which State Revolving Fund Loan Program funds may buy or refinance local debt obligations where the initial debt was incurred after March 7, 1985. Projects that have incurred debt using their own means of financing must have met the requirements of Chapter 0400-46-06 in order to be eligible for refinancing.
- (o) Stormwater Projects. Projects that will convey, store, and/or treat accumulated surface flow water from precipitation.
- (p) Wastewater Treatment Plant (WWTP). Any facility whose purpose is to store, treat, neutralize, stabilize, recycle, reclaim, or dispose of municipal sewage or wastewater.
- (q) Water-Quality Impaired Stream Segment. Any stream segment that has been determined by the Division of Water Resources not to meet its classified uses.

All other terms used in this chapter are as defined in Chapter 0400-46-06 unless the context requires otherwise.

**Authority:** T.C.A. §§ 68-221-801 et seq., 68-221-1001 et seq., and 4-5-201 et seq. **Administrative History:** Original rule filed September 16, 2013; effective December 15, 2013. Rule originally numbered 1200-22-01.

#### **0400-46-01-.02 PRIORITY RANKING, PROJECT CRITERIA POINTS, AND PRIORITY POINT VALUE (PPV) FORMULA.**

- (1) General Provisions for Priority Ranking, Project Criteria Points, and Priority Point Value (PPV) Formula.
  - (a) Purpose. The Priority Ranking System detailed in these rules has been developed to achieve optimum water quality management consistent with the goals and requirements of the Clean Water Act and the Tennessee Water Quality Control Act. Municipal wastewater treatment projects and terms, as defined in Section 212 of the Clean Water Act, such as WWTP upgrades, collection system rehabilitation, infiltration and inflow correction projects, new collector sewers, and combined sewer overflow

(Rule 0400-46-01-.02, continued)

elimination projects and nonpoint source projects, as defined in Section 319 of the Clean Water Act, may be eligible for funding in accordance with these rules.

- (b) Priority Ranking. All proposed projects for which the potential loan recipient has requested financial assistance will be assigned Project Criteria Points based on the project criteria defined in paragraph (2) of this rule. WWTP projects may be assigned additional points based on the Priority Point Value (PPV) formula delineated in paragraph (3) of this rule.
- (c) Combined Project Priority Ranking.
  - 1. When a potential loan recipient operates or proposes to operate more than one WWTP, the PPV will be independently calculated for each WWTP discharge point on the basis of data specific to each WWTP's discharge point.
  - 2. When more than one project appears on the Priority List and those projects are an integral part of the cost-effective solution for one facility's planning area, each of the projects may be assigned the same Priority Point Value as the WWTP that will receive and treat the combined wastewater flow.
- (2) Project Criteria Points. Project Criteria Points will be assigned to individual wastewater facilities projects based on the following:
  - (a) WWTP discharges to a water-quality impaired stream segment will receive 100 Project Criteria Points in addition to any other applicable Project Criteria Points. WWTP projects with a compliance schedule in the NPDES permit requiring construction will receive 50 Project Criteria Points in addition to any other applicable Project Criteria Points.
  - (b) Wastewater collection system projects with a compliance schedule in the NPDES permit requiring construction will receive 50 Project Criteria Points in addition to any other applicable Project Criteria Points.
  - (c) Nonpoint Source (NPS) pollution projects affecting a water-quality impaired stream segment will receive 100 Project Criteria Points. Other NPS pollution projects will receive 25 Project Criteria Points. NPS pollution projects may be directed toward protection or improvement of the quality of ground water, surface water, or wetlands. NPS pollution projects must be consistent with Tennessee's approved Nonpoint Source Management Program requirements and be included in the State's current EPA-approved Nonpoint Source Management Plan.
  - (d) Effluent-trading projects will receive 50 Project Criteria Points in addition to any other applicable Project Criteria Points.
  - (e) Combined Sewer Overflow (CSO) projects will receive 25 Project Criteria Points.
  - (f) Infiltration/Inflow (I/I) correction projects and major sewer rehabilitation projects will receive 25 Project Criteria Points. Construction of projects that will transport and treat I/I at the WWTP will receive 10 Project Criteria Points.
  - (g) Storm water management projects affecting a water-quality impaired stream segment will receive 100 Project Criteria Points. Storm water management projects with a compliance schedule in the NPDES permit requiring construction will receive 50 Project Criteria Points. All other storm water management projects will receive 25 Project Criteria Points.

(Rule 0400-46-01-.02, continued)

- (h) Collection lines to be constructed to address an existing public health problem caused by failed septic systems will receive a minimum of 40 Project Criteria Points up to a maximum of 100 Project Criteria Points. If a Department-certified septic system failure survey utilizing either color infrared aerial photography or ground inspections has been conducted in the project area, Project Criteria Points may be obtained by multiplying the percentage of failing systems by the 100-point maximum Project Criteria Points as follows:
    - 1. Project Criteria Points = 100 x Department-certified percent of septic systems failing
    - 2. Proposed projects will receive a minimum of 40 Project Criteria Points if they are in an area where a Department-certified septic system failure survey was not conducted or where the percentage of failing septic systems was less than 40 percent.
  - (i) Any wastewater project proposed for development and/or growth potential, i.e., projects that were not planned to address a water quality problem or a public health problem, will receive 5 Project Criteria Points. WWTPs that are required to serve new collectors as part of the approved facilities plan will receive the same Project Criteria Points as the collectors.
  - (j) Interceptors and pump stations will receive varying Project Criteria Points. Interceptors and/or pump stations that eliminate a WWTP discharge point that was included in an approved facilities plan will receive the same Project Criteria Points as the WWTP. Interceptors and/or pump stations proposed as part of an I/I elimination project will receive the same Project Criteria Points as the I/I elimination project. Interceptors and/or pump stations proposed as part of a collection system project will receive the same Project Criteria Points as the collection system project.
  - (k) Planning/Design projects will receive Project Criteria Points based upon the proposed project type.
  - (l) Section 212 projects that are also associated with the construction of nonpoint source projects shall have an additional 20 Project Criteria Points.
  - (m) Section 212 projects with zoning that demonstrates preservation of greenspace shall have an additional 15 Project Criteria Points.
  - (n) Section 212 projects with zoning that demonstrates riparian buffer zones of at least 150 feet shall have an additional 10 Project Criteria Points.
  - (o) Section 212 projects demonstrating an enforced buffer zone ordinance shall have an additional 5 Project Criteria Points.
  - (p) Refinancing projects will receive 1 Project Criteria Point.
  - (q) In accordance with T.C.A. § 6-58-109(b), all State Revolving Fund projects within Counties that have an approved growth plan will receive 5 Project Criteria Points in addition to any other applicable Project Criteria Points.
- (3) Priority Point Value (PPV) Formula.

The PPV formula assigns numerical points to a specific WWTP project based on the product of the Receiving Stream Hydraulic Factor (RSHF), Severity of Pollution Factor (SPF), and Water Quality Improvement Factor (WQIF), as follows:

(Rule 0400-46-01-.02, continued)

$$PPV = (RSHF) \times (SPF) \times (WQIF)$$

- (a) The RSHF will be determined based on the ratio of plant discharge to stream flow using the following equation:

$$RSHF = 1.0 + \frac{\text{Plant Flow}}{\text{Stream Flow} + \text{Plant Flow}}, \text{ where}$$

1. Stream flow is the lowest stream flow measured upstream of the WWTP discharge for any 7 consecutive days in a 10-year period. The Department may allow the use of the dilution flow for impoundments.
2. Plant flow is the average daily flow reported on Monthly Operating Reports or Discharge Monitoring Reports submitted to and certified by the Department.

- (b) The SPF will be determined based upon whether violations of the WWTP's permit limits have occurred. The SPF will be determined using the following equation:

SPF = 1.0 + the sum of point values from the following effluent parameters:

1. Biochemical Oxygen Demand, 5-Day (BOD<sub>5</sub>) and/or Carbonaceous Biochemical Oxygen Demand (CBOD<sub>5</sub>) Violation

If the actual BOD<sub>5</sub> and/or CBOD<sub>5</sub> concentration in the WWTP effluent has exceeded the permit limit for BOD<sub>5</sub> and/or CBOD<sub>5</sub> for two consecutive months or three or more times during the last year, the project receives 1 point

2. Total Nitrogen (N-Total) and/or Ammonia Nitrogen (NH<sub>3</sub>-N) Violation

If the actual N-Total and/or NH<sub>3</sub>-N concentration in the WWTP effluent has exceeded the permit limit for N-Total and/or NH<sub>3</sub>-N for two consecutive months or three or more times during the last year, the project receives 1 point

3. Phosphorous (P) Violation

If the actual P concentration in the WWTP effluent has exceeded the permit limit for P for two consecutive months or three or more times during the last year, the project receives 1 point

4. Dissolved Oxygen (DO) Violation

If the actual DO concentration in the WWTP effluent has been less than the minimum permit limit for DO for two consecutive months or three or more times during the last year, the project receives 0.5 points

5. Fecal Coliform and/or E. coli Violation

If the actual fecal coliform and/or E. coli concentration has exceeded the permit limit for fecal coliform and/or E. coli for two consecutive months or three or more times during the last year, the project receives 1 point

- (c) The WQIF applies only to a receiving stream that is a water-quality impaired stream segment. The WQIF will be determined based on the receiving stream's designated

(Rule 0400-46-01-.02, continued)

stream-use classification(s) for recreation, fish and aquatic life, and/or domestic water supply.

The WQIF is the number obtained from the equation:

$$WQIF = 1.0 + F + G + H, \text{ where}$$

1. Recreation, denoted as F, is assigned a numerical value based upon the following:
  - (i) If the existing effluent violates recreational bacterial standards (Chapter 0400-40-03) and causes a significant adverse impact on the receiving waters beyond the mixing zone or precludes the actual use of the receiving waters for body contact recreation beyond the mixing zone, the recreation factor F will be assigned ..... 2 points
  - (ii) If there is no significant impact on recreation, F will be assigned..... 0 points
2. Fish and Aquatic Life, denoted as G, is assigned a numerical value based upon the following:
  - (i) If the existing effluent contains one or more conventional pollutants in excess of the permit limits established by the Department or contained in the WWTP's NPDES Permit or results in violations of the dissolved oxygen standard for fish and aquatic life (Chapter 0400-40-03) in the receiving waters beyond the mixing zone, G will be assigned ..... 3 points
  - (ii) If there is no significant impact on fish and aquatic life, G will be assigned. .... 0 points
3. Domestic Water Supply, denoted as H, is assigned a numerical value based upon the following:
  - (i) If the existing effluent contains one or more conventional pollutants in concentrations exceeding the domestic water supply standard (Chapter 0400-40-03) in waters affecting an existing community water treatment plant, H will be assigned ..... 4 points
  - (ii) If there is no significant adverse impact on domestic water supply, H will be assigned ..... 0 points
4. No WQIF points will be awarded for F, G, and H if the existing treatment facility is not operated and maintained properly, as determined by the Department's evaluation of the facility's operation and maintenance.

**Authority:** T.C.A. §§ 68-221-801 et seq., 68-221-1001 et seq., and 4-5-201 et seq. **Administrative History:** Original rule filed September 16, 2013; effective December 15, 2013. Rule originally numbered 1200-22-01.

**0400-46-01-.03 PROGRAM MANAGEMENT.**

- (1) The assigned Project Criteria Points and the calculated Priority Point Value are applicable only to WWTP projects and will be summed to establish a proposed project's Priority Rank. Projects will be placed on the Priority Ranking List in ascending order by Priority Rank, i.e., in descending order by total project priority points.



(Rule 0400-46-01-.03, continued)

- (2) When the project is placed on the Priority Ranking List, the potential loan recipient is responsible for providing a written detailed project description, a schedule of events, and an up-to-date project cost estimate to the Department. The Department may request adjustments to the cost estimate at its discretion.
- (3) The Department will use the project cost estimates on the Priority Ranking List to allocate available funds to as many potential loan recipients as possible in order to protect public health and the environment. The Department may limit the award amount per loan in order to provide funds to more potential loan recipients.
- (4) The priority of available funds will be assigned to those projects with the highest Priority Rank on the Priority Ranking List with preference given to those projects that are ready to proceed.
- (5) The Department may bypass projects on the Priority Ranking List that are not ready to proceed. The Department may also bypass projects if a completed loan application has not been received within 90 days after notification from the Department to the potential loan recipient that failure to submit the completed application will result in a bypass.
- (6) Proposed projects with a lower Priority Rank may be fundable by virtue of bypass. Preference will be given to those lower-ranked projects that are ready to proceed and that will make progress towards compliance with the enforceable requirements of the Clean Water Act and the Tennessee Water Quality Control Act.
- (7) Projects may be purged from the Priority Ranking List annually, on April 15. Projects may be reinstated to the Priority Ranking List upon the Department's receipt of a letter requesting the reinstatement. The letter must also include a written, detailed project description and an up-to-date project schedule and cost estimate.
- (8) The Department will remove a project from the Priority Ranking List prior to April 15 annually when financial assistance has been awarded or upon receipt of a written request from the potential loan recipient that they no longer want to include their project on the Priority Ranking List.

**Authority:** T.C.A. §§ 68-221-801 et seq., 68-221-1001 et seq., and 4-5-201 et seq. **Administrative History:** Original rule filed September 16, 2013; effective December 15, 2013. Rule originally numbered 1200-22-01.