

TITLE 250 – DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

CHAPTER 150 – WATER RESOURCES

SUBCHAPTER 10 – WASTEWATER & STORMWATER

PART 4 – RULES AND REGULATIONS FOR THE OPERATION AND MAINTENANCE OF WASTEWATER TREATMENT FACILITIES

4.1 Purpose

- A. It is the purpose of these Rules and Regulations to ensure that wastewater treatment facilities are at all times maintained in acceptable working order and operated at their maximum level of efficiency to adequately transport and/or remove the maximum amount of objectionable constituents in wastewater, and to serve the purposes of the Federal Clean Water Act and applicable R.I. Gen. Laws. To achieve this purpose these Rules and Regulations provide the provisions for Owners of a wastewater treatment facility to submit for approval and, once approved, adhere to an Operation and Maintenance Plan. Accordingly these Rules and Regulations establish a procedure for the evaluation and approval of operation and maintenance plans by the Department of Environmental Management.

4.2 Authority

- A. These Rules and Regulations are adopted pursuant to R.I. Gen. Laws Chapters 46-12, 42-17.1, 42-17.6 and 42-35.

4.3 Repealed.

4.4 Definitions

- A. For the purposes of these Rules and Regulations only, the subsequent terms shall have the following meanings:
1. "Asset" means a major application, general support system, high impact program, physical plant, mission critical system, equipment, or a logically related group of systems as they relate to the operation and maintenance of a wastewater treatment facility.
 2. "Combined sewer overflow" means a structure within a combined sewage collection system that allows a permitted discharge during a wet-weather event into a receiving water without going to a treatment works.

3. "Cybersecurity" means the prevention of damage to, protection of, and restoration of computers, electronic communications systems, electronic communications services, wire communication, and electric communication, including information contained therein, to ensure its availability, integrity, authentication, confidentiality, and nonrepudiation.
4. "Department" means the Rhode Island Department of Environmental Management.
5. "Director" means the Director of the Department of Environmental Management or his/her designee(s).
6. "NPDES" means the National Pollution Discharge Elimination System, which may include the delegated Rhode Island Pollution Discharge Elimination System.
7. "National preparedness goals" means those goals for a secure and resilient nation with the capabilities required across the whole community to prevent, protect against, mitigate, respond to, and recover from the threats and hazards that pose the greatest risk. For the purposes of these regulations, whenever the term "National Preparedness goals" is used, the whole community encompasses the community or communities serviced by the wastewater treatment facility.
8. "Operation and maintenance plan" or "Plan" means either an electronic or paper document submitted to the Director for evaluation and written approval. Each document shall include, but not be limited to, a description of the specific wastewater treatment facility, procedures for operation and maintenance, required staffing levels, design and other pertinent information as enumerated in § 4.5 of this Part.
9. "Owner" means
 - a. The permittee named on the NPDES permit issued for the wastewater treatment facility, or,
 - b. A city or town or the State of Rhode Island, or district association, or other public body (created by or pursuant to Rhode Island State Law) having jurisdiction over a wastewater treatment facility.
10. "Resilience" means the ability to reduce the magnitude and/or duration of disruptive events and to quickly adapt and recover from any known or unknown changes to the environment —physical or electronic—through holistic implementation of risk management, contingency, and continuity planning.
11. "Risk and resiliency coordinator(s)" means a position or positions in authority within the management, operations, and/or maintenance

functions of a wastewater treatment facility that is responsible for implementing the National Preparedness Goals. The risk and resiliency coordinator(s) may be either a standalone position or a function held by several individuals and at a minimum will

- a. Coordinate with state, federal, and industry-based risk assessment, monitoring, and response organizations.
 - b. Organize and administer training and other resources for management, financial decision makers, and front-line staff of the wastewater treatment facility regarding all aspects of the National Preparedness Goals for physical, natural, or cyber-related risks that may impact the operations and maintenance of the wastewater treatment facility.
 - c. Be responsible for all of the state and federal reporting requirements.
12. "Risk management plan" means a plan that documents how a wastewater treatment facility will identify, assess, and mitigate potential risks throughout its lifecycle ensuring the data, personnel, devices, systems, and facilities are effectively identified, managed, and implemented to maintain permit compliance and operational efficiency.
13. "Sanitary sewer overflow" means an intentional or unintentional discharge of raw or partially treated wastewater from any point within a wastewater treatment facility's collection system. For the purposes of these regulations a sanitary sewer overflow will not include a wet-weather-related discharge from any combined sewer overflow authorized within a NPDES permit.
14. "Substantial cyber incident" means a cyber incident that causes a disruption or potential disruption to the wastewater treatment process and/or systems related to the operation and maintenance of the facility or permit compliance. This includes but is not limited to impacts to information technology and/or operational technology related to the operation and maintenance of the facility or permit compliance.
15. "Wastewater" means human waste from any receptacles intended to receive or retain bodily waste products, and any organic or non-biological wastes from residences, businesses, institutions and industries or any combination of the above, as well as any water used as a means of conveyance of such wastes, which is intended to enter a wastewater treatment facility for collection, conveyance, treatment and discharge in accordance with a NPDES permit.
16. "Wastewater treatment facility" means a group or assemblage of processes, devices and structures for the conveyance, treatment or

removal of objectionable constituents of wastewater. A wastewater treatment facility shall include, but not be limited to, all physically connected wastewater collection system piping, pumping, storage, physical, chemical and/or biological treatment, filtering and disinfection systems. For the purposes of these Rules and Regulations, a wastewater treatment facility shall include privately owned wastewater collection, pumping, storage and conveyance systems interconnected with and emptying into a host wastewater collection system. For the purposes of these Rules and Regulations, a wastewater treatment facility shall not be considered to be:

- a. An Onsite Wastewater Treatment System, which does not discharge into surface waters but discharge into subsurface waters; or,
- b. Any privately owned plumbing; or,
- c. Any privately owned low-pressure grinder pumps; or,
- d. Any privately owned gravity sewer lines conveying an average flow of less than 30,000 gallons per day, as calculated by the Department's "Flow Estimation Policy for Design of Sanitary Sewers."

4.5 Operation and Maintenance Plan Requirements

- A. At all times, wastewater treatment facilities shall be maintained in good working order and operated as efficiently as possible. Proper operation and maintenance may include but not be limited to effective performance based on facility design, adequate funding, effective management, adequate operator staffing and training and adequate laboratory and process controls including quality assurance procedures as determined to be appropriate by the Director and backup or auxiliary facilities or similar systems to assure compliance or effective performance.
- B. The Owner shall submit for review and approval by the Director a Plan prescribing standards and procedures by which the wastewater treatment facility will be staffed, operated and maintained during normal and emergency conditions. Should development of the Plan include the practice of engineering, the Plan must then be prepared and certified by a Registered Professional Engineer registered in the State of Rhode Island.
- C. The Owner of a new wastewater treatment facility, or the Owner of an existing wastewater treatment facility that is being upgraded shall submit a draft Plan, or draft revisions to an existing approved Plan, to the Director for review and approval at least sixty (60) days prior to commencement of operation of the new or upgraded wastewater treatment facility.

- D. The Owner of an existing wastewater treatment facility without an approved Plan must submit for review and approval a Plan necessary to comply with the requirements herein within one (1) calendar year of the promulgation of these Rules and Regulations, or at some other pre-approved time as determined at the discretion of the Director.
- E. The Owner of an existing wastewater treatment facility with an approved Plan must submit for review and approval all revisions necessary to comply with the requirements herein within one (1) calendar year of the promulgation of these Rules and Regulations, or at some other pre-approved time as determined at the discretion of the Director.
- F. The Owner may request an extension in time to complete and submit the required revisions or submission of a Plan, per §§ 4.5(D) and (E) of this Part, but this extension cannot exceed one year in addition to the one year herein.
 - 1. A request for submission extension must be in writing and be received by the Department no later than three (3) months prior to the required submittal date. Any request received later than three months prior to the required submittal date will be denied.
 - 2. The request for extension must include all applicable reasons that would require additional time for the submission of a draft plan.
 - 3. It shall be at the Director's discretion to approve or deny such a request for extensions of submission.
- G. The Owner of any existing wastewater treatment facility operating on the effective date of these Rules and Regulations shall continue to operate the wastewater treatment facility in compliance with an existing approved Plan, which shall remain in full force and effect unless suspended or revoked by the Director in accordance with § 4.13 of this Part.
- H. The contents of the Plan shall include at a minimum the following:
 - 1. Descriptions and schematics of the entire wastewater treatment facility in either paper or electronic form, and an overall plan with appropriate labels for major components (i.e. collection piping and pumping, headworks, clarifiers, aeration tanks, disinfection, sludge handling, etc.), outfall(s) and compliance sampling locations. This description and schematic must include:
 - a. Sewer-line maps of the collection system, which will include but not be limited to the overall service area, as well as the locations of incoming wastewater from neighboring communities, pipe diameter, distances between centers of manholes, slope or direction of flow, and the locations of all pump stations, siphons, etc., (noting design capacities) and flow meters. Other required collection system

information may include, but not be limited to, the dimensions of easements and property lines.

- b. The information stated herein (that is, in § 4.5(H)(1)(a) of this Part will be submitted to the Department for review via a file geodatabase or other GIS-compatible formats, and shall also be available onsite for review by the Director at any time.
 - c. A summary of all design criteria, including capacity calculations, for the wastewater treatment facility.
- 2. Descriptions of, and detailed operating procedures for, all treatment processes and major and essential equipment and assets within the wastewater treatment facility, including sampling and monitoring equipment. Said procedures will include target ranges and alarm set points.
- 3. Description of preventative maintenance procedures for the wastewater treatment facility. This must include information stored within an adequate data-management system to track maintenance activities.
- 4. A risk management plan including but not limited to actions taken to manage the risk of substantial cyber incidents and that identifies the Risk and Resiliency Coordinator(s).
- 5. A listing of supplies and essential spare parts necessary to be kept on site for normal and emergency use throughout the wastewater treatment facility, or certification that all essential spare parts are managed by the wastewater treatment facility in comprehensive asset management software, and shall be made available upon request.
- 6. A staffing plan of staff directly involved in the operations, maintenance, collections systems, and laboratory of the wastewater treatment facility, including but not limited to:
 - a. position descriptions,
 - b. managerial and staffing hierarchy organization chart,
 - c. minimum qualifications and training requirements
 - d. indications as to whether the position is full- or part-time, and,
 - e. required Grade of Licensure, as stated by any Rules and Regulations promulgated by the Rhode Island Board of Certification of Operators of Wastewater Treatment Facilities.

- f. A staffing analysis shall be performed and submitted to the Department, along with a proposed staffing plan for review and approval, every five (5) years to ensure the facility is adequately staffed for proper operations and maintenance.
- 7. A description of any provisions to ensure security and resilience of the wastewater treatment facility's physical and electronic data-management systems. Per the National Preparedness Goals of identify, prevention, protection, mitigation, response, and recovery.
- 8. Emergency procedures and reporting requirements in case of power outages, natural disaster, labor shortage (whether the result of intentional work stoppages or epidemic), equipment failure, acts of terrorism/vandalism, substantial cyber incidents at a wastewater treatment facility, or sanitary sewer overflow. Reporting requirements shall include verbal notification to the Department as soon as possible but not exceeding twenty-four (24) hours from discovery of the event; for a sanitary sewer overflow, an electronic report must be submitted to the Department not more than five (5) calendar days from the discovery of the event; and for all other events, a written report must be submitted to the Department not more than five (5) calendar days from discovery of the event, if required by the Department. Notifications to DEM of a substantial cyber incident will be treated and handled by DEM as confidential information of the wastewater treatment facility until the substantial cyber incident has been resolved and where release is not required by state or federal law.
- 9. Documentation of plans for threat prevention, protection, mitigation, response, and recovery in case of power outages, natural disaster, substantial cyber incident, labor shortage (whether the result of intentional work stoppages or epidemic), equipment failure, acts of terrorism/vandalism, sanitary sewer overflow, and supply chain disruptions.
- 10. Procedures for records keeping for at least five (5) years of the time of recording.
- 11. Seasonal operational requirements, where applicable.
- 12. A schedule for self-monitoring of influent and effluent, treatment processes and operations to be reported on forms (paper or electronic) required by the Director.
- 13. A copy of the wastewater treatment facility's National Pollution Discharge Elimination System (NPDES) or Rhode Island Pollution Discharge Elimination System (RIPDES) discharge permit.
- 14. Laboratory and sample collection procedures.

15. A description of operational funding mechanisms, to be updated at any time said funding mechanism changes.
16. A copy of the sewer use ordinance.
17. Procedures for tracking information regarding legally responsible parties of privately owned wastewater treatment facilities that are physically connected to, and so empty into, an Owner's wastewater treatment facility. Such information must include, at a minimum, the retention of up-to-date and accurate contact information, including names, addresses and emergency communication information for all privately owned wastewater treatment facilities connected to an Owner's wastewater treatment facility.
18. Procedures for informing responsible parties of privately owned wastewater treatment facilities that are physically connected to, and so empty into, an Owner's wastewater treatment facility that, at a minimum, said parties are under the authority of these regulations.
19. Procedures for monitoring that privately owned wastewater treatment facilities that are physically connected to, and so empty into, an Owner's wastewater treatment facility, are operated and maintained in accordance with § 4.5(A) of this Part. These procedures shall include a plan for action by the Owner should it become known that a privately owned wastewater treatment facility has failed.
20. Provisions that the wastewater treatment facility will minimize sanitary sewer overflows by maintaining and planning for proper collection-system capacity. This must include a description of methods for wastewater treatment facility capacity management with details on the selection and enforcement of any and all legal authority necessary for an Owner to ensure system capacity by regulating the volume of flow entering the wastewater treatment facility, including but not limited to residential and commercial customers, neighboring communities and industrial users. Such legal authority may include project approval requirements at the local level, sewer-use ordinances, contracts, service agreements and/or other legally binding documents.
21. A schedule for implementation of §§ 4.5(H)(15) through (18) of this Part above.

4.6 Procedures for the Evaluation and Approval of a Plan

- A. The Director shall evaluate each Plan submitted giving full consideration to the wastewater treatment facility design parameters, public health requirements and sound engineering, administrative and maintenance practices.

- B. In reviewing a Plan, the Director may use as guidance the following documents: “Guides for an Operation and Maintenance Manual for Municipal Wastewater Treatment Facilities” and “Guides for an Operation and Maintenance Manual for Municipal Wastewater Pumping Stations and/or Pipelines,” and/or the “NPDES Compliance Inspection Manual,” by the U.S. Environmental Protection Agency (EPA); a current edition of “Operation of Municipal Wastewater Treatment Plants” by the Water Environment Federation; “Standard Methods for the Examination of Water and Wastewater”; National Institute of Standards and Technology (NIST) Cybersecurity Framework, and other standards, guidance and policies accepted by the Director.
- C. Upon review of the Plan, the Director may:
1. Require that the Owner provide information as the Director deems necessary for the review of the Plan; if additional information is required the Owner must submit said information within thirty (30) days of notification, unless a longer time is granted, or,
 2. Issue an Order of Approval. This Order of Approval, however, may if needed include stipulations requiring any such terms, conditions, management practices and operation and maintenance requirements deemed necessary by the Director for the Plan to comply with the requirements of these Rules and Regulations and applicable state and federal laws, or,
 3. Deny the Plan for failure to satisfy the requirements of these Rules and Regulations and applicable state or federal laws. Should such a denial be issued by the Director, the Owner shall have the right to appeal the denial in accordance with § 4.14 of this Part.
- D. Upon approval of the Plan, the Department will issue an Order of Approval and forward to the owner one copy of the approved Plan along with the Order of Approval. This approved copy must at all times be kept on site at the wastewater treatment facility and must be available for use by facility operators. A second identical approved copy will remain on file with the Department.
- E. The Order of Approval issued for a Plan shall be effective on the date that the approval is issued and shall remain in effect unless modified, suspended or revoked in accordance with § 4.12 of this Part.

4.7 Operation in Accordance with Approved Plan

- A. After the effective date of the approved Plan, the wastewater treatment facility shall be operated and maintained at all times in conformance with § 4.5 of this Part and all aspects of the Plan.

- B. After the effective date of the approved Plan, failure to operate and maintain the wastewater treatment facility in accordance with the approved Plan shall constitute a violation of an order of the Director pursuant to R.I. Gen. Laws § 46-12-3 of the Water Pollution Act. Each day that a wastewater treatment facility is not operated in conformance with an approved Plan shall constitute a separate violation.

4.8 Staffing

- A. All wastewater treatment facilities regulated by the Rhode Island Board of Certification of Operators of wastewater treatment facilities must be operated and maintained by properly certified personnel in accordance with the Rules and Regulations for Wastewater Treatment Facility Operators.

4.9 Odors

- A. All wastewater treatment facilities must comply with Part 120-05-17 of this Title, or other Rules and Regulations pertaining to odors. As such, a wastewater treatment facility shall, at all times, be operated and maintained so as not to emit or cause to be emitted into the atmosphere any air contaminant or combination of contaminants which creates an objectionable odor beyond the property line of said facility.

4.10 Records of Operation

- A. The Director may require any wastewater treatment facility to:
1. Establish and maintain records of operation and maintenance, either physical or electronic.
 2. Create and submit reports, including but not limited to monthly operating reports, alarm calibration and testing reports, etc., as well as documentation of any equipment or electronic system failure or compromise.
 3. Install, calibrate, use and maintain monitoring equipment or methods.
 4. Sample discharges in accordance with such methods at locations, at intervals, and in a manner as the Director shall prescribe. Such sampling may be in addition to that required by NPDES monitoring requirements.
 5. Provide other information relating to discharges into the state waters or into a wastewater treatment facility as the Director may reasonably require.

4.11 Inspection; Right of Entry

- A. For the purpose of enforcing these Rules and Regulations, it is necessary that the Director be able to conduct inspections of, review records of operation and obtain samples of any substance from a wastewater treatment facility, and to evaluate a proposed Plan and/or ensure that operation and maintenance is in conformance with an approved Plan, as well as state and federal laws related to wastewater treatment. Therefore in accordance with the Department of Environmental Management's Administrative Inspection Guidelines, the Director may at all reasonable times enter any wastewater treatment facility premises, buildings, plants or equipment, or other places belonging to, or controlled by any Owner, inspect the same or any part thereof, review and copy records of operation, either physical or electronic, historical or real-time, and obtain samples of any substances which the Director deems necessary.
- B. Any person obstructing, hindering, or in any way causing to be obstructed or hindered, the Director in the performance of his/her duties or who shall refuse to permit the Director entrance into any wastewater treatment facility premises, buildings, plant or equipment, or other places belonging to or controlled by any such person, or who shall refuse to permit the Director to review and copy records of operations or obtain samples of any substances, in the performance of his/her duties as such, shall be subject to the civil and criminal penalties set forth in R.I. Gen. Laws §§ 46-12-13 and 46-12-14.

4.12 Revision of an Approved Plan

- A. An approved Plan shall not be revised in any manner without the prior submission of the proposed revision to the Director for review and approval at least forty-five (45) days prior to implementation unless an alternative timeframe is approved by DEM. The Director may also require at any time that an approved Plan be revised for reasons which include, but are not limited to, a determination that there has been a substantial change or alteration in the wastewater treatment facility's capacity, treatment process, equipment or effluent or influent wastewater characteristics.
- B. Revisions to an approved Plan will generally be approved by issuing a "modified Order of Approval." Minor revisions may be approved by the Director as Standard Operating Procedures. Once the Director approves a Standard Operating Procedure it shall be considered an addendum of the approved Plan, and as such must be adhered to in accordance with § 4.5 of this Part.

4.13 Enforcement

- A. Any Owner that operates a wastewater treatment facility without an approved Plan, or a person or entity operating a wastewater treatment facility in violation of an approved Plan or otherwise operates a wastewater treatment facility in violation of these Rules and Regulations shall be subject to administrative

enforcement actions, and/or civil and/or criminal penalties pursuant to R.I. Gen. Laws Chapters 46-12, 46-17.1 and 42-17.6.

- B. Operation of a wastewater treatment facility without an approved Plan or operation in violation of an approved Plan may constitute grounds for the Director to suspend or revoke state grants for pollution prevention facilities.
- C. The Director may seek appropriate equitable remedies pursuant to R.I. Gen. Laws Chapter 46-12, as amended for the operation of a wastewater treatment facility without an approved Plan or operation of a wastewater treatment facility in violation of an approved Plan.
- D. After adoption of a Plan, the plan shall be enforced through R.I. Gen. Laws § 46-12-10.

4.14 Appeals

- A. Any person or entity for which an enforcement action has been initiated against by DEM may appeal to the Director for review of the decision on which the enforcement action is based by filing an appeal with the Administrative Adjudication Division. The procedures for appeal of Department decisions pursuant to the provisions of R.I. Gen. Laws Chapter 42-35 are contained in the Administrative Rules of Practice and Procedure for the Administrative Adjudication Division for Environmental Matters ("AAD Regulations").

4.15 Repealed.

4.16 Repealed.

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