STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS DEPARTMENT OF ENVIRONMENTAL MANAGEMENT Office of Water Resources

# **GROUNDWATER DISCHARGE RULES**

## [RULES FOR THE DISCHARGE OF NON-SANITARY WASTEWATER AND OTHER FLUID TO OR BELOW THE GROUND SURFACE]



October 2014

AUTHORITY: These rules are adopted in accordance with Chapter 42-35 pursuant to Chapters 46-12, 46-13.1, 42-17.1, and 42-17.6 and of the Rhode Island General Laws of 1956, as amended.

## TABLE OF CONTENTS

RULE 1.	PURPOSE	3
RULE 2.	AUTHORITY	3
RULE 3.	LIBERAL APPLICATION	3
RULE 4.	APPLICABILITY	3
RULE 5.	DEFINITIONS	4
RULE 6.	UNDERGROUND INJECTION CONTROL (UIC) PROGRAM	6
RULE 7.	PROHIBITIONS	8
RULE 8.	CONDITIONS FOR AUTHORIZATION	8
RULE 9.	GROUNDWATER DISCHARGE SYSTEM REGISTRATION	10
RULE 10.	GROUNDWATER DISCHARGE SYSTEM APPROVAL	13
RULE 11.	STORMWATER DISCHARGE SYSTEM REGISTRATION	15
RULE 12.	UIC PROGRAM REGISTRATION OR APPROVAL ISSUED PRIOR TO RULES	17
RULE 13.	TEMPORARY GROUNDWATER DISCHARGE SYSTEM APPROVAL	19
RULE 14.	COMPLIANCE MONITORING OF A GROUNDWATER DISCHARGE	20
RULE 15.	MODIFICATION OF A GROUNDWATER DISCHARGE SYSTEM	22
RULE 16.	TRANSFER OF OWNERSHIP OF A GROUNDWATER DISCHARGE SYSTEM	23
RULE 17.	TEMPORARY CESSATION OF A GROUNDWATER DISCHARGE	24
RULE 18.	CLOSURE OF A GROUNDWATER DISCHARGE SYSTEM	24
RULE 19.	APPLICATION FEES	27
RULE 20.	ENFORCEMENT	27
RULE 21.	APPEALS	27
RULE 22.	SUPERSEDED RULES AND REGULATIONS	28
RULE 23.	SEVERABILITY	28
RULE 24.	PENALTIES	28
RULE 25.	EFFECTIVE DATE	28

#### STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS DEPARTMENT OF ENVIRONMENTAL MANAGEMENT Office of Water Resources

#### **GROUNDWATER DICHARGE RULES**

#### **RULE 1. PURPOSE**

It is the purpose of these rules to protect and preserve the quality of the groundwater of the State of Rhode Island (the "State") and, in coordination with the federal Safe Drinking Water Act, to prevent contamination of groundwater resources from the discharge of non-sanitary wastewater or other fluid to or below the ground surface. It is thereby the policy of the Department of Environmental Management that the discharge of non-sanitary wastewater or other fluid and the associated groundwater discharge system shall be designed, located, constructed, installed, operated, monitored and closed in a manner to prevent such contamination and to protect public health and groundwater quality for current or potential beneficial uses, including use as an underground source of drinking water.

#### **RULE 2. AUTHORITY**

These rules are adopted pursuant to the requirements and provisions of Chapter 46-12, Water Pollution; Chapter 46-13.1, Groundwater Protection; Chapter 42-17.1, Environmental Management; Chapter 42-17.6, Administrative Penalties for Environmental Violations; and in accordance with Chapter 42-35, Administrative Procedures of the Rhode Island General Laws of 1956. These rules are in conformance with the requirements of applicable federal regulations in Chapter 40 of the Code of Federal Regulations, Parts 144, 145, 146, 147, 148 and 124. Specific delegation from the U.S. Environmental Protection Agency to the State is outlined within 40 CFR §147.2000 (with citation to the federal Safe Drinking Water Act, 49 FR 30699, August 1, 1984, as amended at 53 FR 43090, October 25, 1988).

#### **RULE 3. LIBERAL APPLICATION**

The terms and provisions of these rules shall be liberally construed to allow the Department to effectuate the purposes of State and federal laws, goals and policies.

#### **RULE 4. APPLICABILITY**

4.1 These rules apply to the design, location, construction, installation, operation, monitoring and closure of a groundwater discharge of non-sanitary wastewater or other fluid that is piped or otherwise designed to discharge to or below the ground surface through a groundwater discharge system, whether proposed or currently or previously in use. This includes all injection wells regulated under the RIDEM Underground Injection Control Program pursuant to the federal Safe Drinking Water Act.

4.2 Obligations of facility owners and facility operators hereunder shall be joint and several.

4.3 These rules shall be construed in harmony with other State and federal laws, rules, regulations and standards. Nothing in these rules shall affect the power and duty of the Director to issue or require any form of action pursuant to any other regulatory program administered or enforced by the Department.

4.4 Nothing in these rules shall affect the power and duty of the Director to issue an immediate compliance order or take any other action pursuant to the Rhode Island General Laws.

#### **RULE 5. DEFINITIONS**

For the purposes of these rules, the following words and phrases shall have the following meanings:

"Abandoned" means a groundwater discharge system for which its use has been permanently discontinued or which is in a state of disrepair such that it cannot be used for its intended purpose. Temporary or intermittent cessation of operation does not constitute abandonment.

"Aquifer" means a geologic formation, group of formations or part of a formation that contains sufficient saturated, permeable material to yield significant quantities of water to drinking water wells and springs.

"Department" means the Rhode Island Department of Environmental Management.

"Director" means the Director of the Rhode Island Department of Environmental Management or any authorized designee to whom the Director has delegated the vested powers and duties pursuant to the Rhode Island General Laws.

"Drywell" means a well, completed above the groundwater table so that its bottom and sides are typically dry except when receiving fluids.

"Facility" means any parcel of real estate or a contiguous series of parcels of real estate together with any and all structures, facility components, improvements, fixtures and other appurtenances located therein or thereon which constitutes a distinct geographic unit.

"Floor Drain" means an opening or intended drainage point in a floor that serves as a point of entry into a groundwater discharge system.

"Fluid" means any material or substance that flows or moves whether liquid, gas, semi-solid or any other form or state. Fluids may include, for example, water for beneficial use projects such as aquifer storage or recharge, or wastewater.

"Formation" means a body of rock characterized by a degree of lithologic homogeneity which is prevailingly tabular and is mappable on the earth's surface or traceable in the subsurface.

"Geologic Sequestration" means the process of injecting carbon dioxide (CO2), which has been compressed into a liquid state, into the deep subsurface through an injection well. Geologic sequestration refers to a suite of technologies that may be deployed to reduce CO2 emissions to the atmosphere to help mitigate climate change.

"Groundwater" means the water located beneath the ground surface which completely fills the open spaces between particles of sediment and within rock formations.

"Groundwater Discharge" means the disposal, deposit or placement of non-sanitary wastewater or other fluid below the ground surface or the disposal, deposit or placement of non-sanitary wastewater or other fluid to the ground surface in a manner and location where it may adversely impact the groundwater resources of the State.

"Groundwater Discharge System" means a discharge system that is piped or otherwise designed, located, constructed, installed and operated so as to infiltrate or inject a groundwater discharge of non-sanitary wastewater or other fluid to or below the ground surface, including a drywell, drainfield, galley, injection well, stormwater discharge system, subsurface fluid distribution system, open-end pipe or other conveyance onto the surface of the ground.

"Groundwater Table" means the upper surface of the zone of saturation in an unconfined aquifer; includes a perched groundwater table.

"Hazardous Waste" means any waste or material, either a characteristic waste or a specific listed waste, as defined in the Code of Federal Regulations (CFR), Title 40 - Protection of Environment, Rule 261.3 or the Rhode Island Hazardous Waste Management Act, Title 23, Chapter 19.1.

"Injection Well" means a well or subsurface fluid distribution system regulated under the federal Underground Injection Control (UIC) Program and these rules that is used or intended to be used to discharge wastewater or other fluid below the ground surface. Injection wells are groundwater discharge systems.

"Motor Vehicle Waste Disposal Well" means a well that receives or has received wastewater or other fluid from an area where the repair, maintenance or servicing of motor vehicles occurs or has occurred, including, without limitation, fluid from a motor vehicle engine or body repair shop, a specialty or recreational vehicle repair shop, a new or used car or truck dealership or any other facility that repairs or maintains motor vehicles whether services are offered to the public or not. Motor Vehicle Waste Disposal Wells also drain motor vehicle washing areas where the wash bay is not physically separated from a motor vehicle maintenance area or where engine or undercarriage cleaning is performed. Motor Vehicles include automobiles, buses, trucks, trains, powerboats, motorcycles, farm machinery, aircraft, lawn care and landscaping equipment, heavy equipment, recreational vehicles such as snowmobiles, all terrain vehicles and jet skis, and any other motorized vehicle.

"Operator" means any person or persons having control or legal responsibility for operating or maintaining any facility or site subject to regulation under these rules.

"Owner" means the owner and/or operator of any facility subject to regulation under these rules or any person who holds legal title to or has possession or control of any facility subject to regulation under these rules through any agent, executor, executrix, administrator, trustee or guardian of the estate of the holder of legal title. Each such person is bound to comply with the provisions of these rules.

"Person" means an individual, trust, estate or firm, a public, quasi-public or private corporation, a partnership, association, non-profit, federal, state or municipal government or any of their agencies or any other legal entity whatsoever.

"Pollutant" means a liquid, gaseous, solid, radioactive or other substance in any water of the State which may, either by itself or in connection with any other substance, create a public nuisance or which may render such water harmful, detrimental or injurious to public health or the environment or to domestic, commercial, industrial, agricultural, recreational or other legitimate beneficial uses.

"RIDEM" means the Rhode Island Department of Environmental Management.

"Sanitary Wastewater" means any liquid or solid waste originating from human or animal activities, putrescible animal or vegetable matter or garbage and filth, including but not limited to, wastes collected from toilets, showers, wash basins, sinks used for cleaning domestic areas and/or food preparation, clothes washing or floor cleaning operations and sinks or washing machines where food and beverage serving dishes, glasses and utensils are cleaned.

"Sink" means a structure such as a basin or washbowl that receives wastewater from hand washing and other uses and serves as a point of entry into a groundwater discharge system.

"Site" means the land or water area where any facility or activity is physically located or conducted, including adjacent land used in connection with the facility or activity.

"Stormwater" means water from precipitation runoff or snow melt.

"Stormwater Discharge System" means a groundwater discharge system used to infiltrate stormwater.

"Subsurface Fluid Distribution System" means a federal term synonymous with groundwater discharge system.

"UIC" means the federal Underground Injection Control Program.

"Wastewater" means non-sanitary wastewater.

"Well" means a bored, drilled or driven shaft or a dug hole that is deeper than the widest surface dimension and designed to discharge or inject wastewater or other fluid below the ground surface. This includes a subsurface fluid distribution system, holes drilled and cased with pipe, and infiltration systems consisting of one or more vertical pipes leading to an array of horizontal, perforated pipes laid below the ground surface.

## RULE 6. UNDERGROUND INJECTION CONTROL (UIC) PROGRAM

The Underground Injection Control Program is a federally delegated program administered by the Department and the U.S. Environmental Protection Agency (EPA) under the federal Safe Drinking Water Act and is designed to protect groundwater resources from the subsurface disposal of hazardous and non-hazardous wastewater or other fluid through injection wells. The following classifications are used to define the six classes of injection wells regulated by the program based on their use and are described below for informational purposes. Note: Classes I-III injection wells are prohibited in Rhode Island; Class IV injection wells are allowed only in accordance with Rule 10.1.2; Class V wells include injection wells other than Classes I-IV and, with Class IV wells, are groundwater discharge systems subject to all requirements of these rules.

6.1 Class I wells are used by generators of hazardous waste or owners or operators of hazardous waste management facilities to inject hazardous waste; by municipalities to inject municipal wastewater; by industries to inject non-hazardous industrial waste; and, for injection of radioactive fluids. These are deep wells that inject fluids below the lowermost formation containing groundwater.

6.2 Class II wells are used to inject fluids that are brought to the surface in connection with natural gas storage operations or conventional oil or natural gas production; to enhance recovery of oil or natural gas; and, for storage of hydrocarbons that are liquid at standard temperature and pressure.

6.3 Class III wells are used to inject fluids for the extraction of minerals including mining of sulfur by the Frash process; in-situ production of uranium or other metals from ore bodies that have not been conventionally mined; and, for the solution mining of salts or potash.

6.4 Class IV wells are used to inject hazardous or radioactive waste into or above the lowermost formation containing groundwater; to discharge solutions to remediate contamination in-situ; or, to discharge contaminated groundwater that has been treated and is being discharged into the same formation from which it was drawn, pursuant to provisions of clean-up of releases under the federal CERCLA or RCRA programs or state clean-up program delegated these federal authorities.

6.5 Class V wells are those wells not included in Classes I-IV that inject wastewater or other fluid, other than hazardous waste, directly below the ground surface and have a variety of uses including but not limited

to the following:

6.5.1 Wells used to inject water into an aquifer to replenish the aquifer;

6.5.2 Wells used to store potable water in an aquifer and to recover the stored water from the same well for beneficial use;

6.5.3 Wells used to inject water into fresh water aquifers to prevent intrusion of salt water into fresh water;

6.5.4 Wells used to discharge a mixture of water and sand, mill tailings or other materials into mined-out portions of underground mines;

6.5.5 Wells used to inject fluid into a non-oil or gas-producing zone to reduce, eliminate or control subsidence;

6.5.6 Wells used to discharge spent geothermal fluid associated with the extraction of heat, or as a heat sink to carry off excess heat when cooling buildings, through a ground-source heat pump/air conditioning system or direct-heat application; or, for the production of electric power;

6.5.7 Wells used to discharge a variety of non-contact water that contains no additives and has not been chemically altered (e.g. cooling water, water from water supply treatment testing, filter backwash, boiler blowdown, etc.);

6.5.8 Wells used to discharge a variety of fluids that cannot otherwise be classified as agricultural, industrial or stormwater;

6.5.9 Wells used to drain rainwater and melted snow from impervious surfaces;

6.5.10 Wells used to discharge fluids from floor drains or sinks in areas where motor vehicle repair, maintenance or service activities occur (this activity is prohibited);

6.5.11 Wells used for beneficial purposes associated with the control of groundwater contamination, including, for example, the introduction of remedial agents into contaminated aquifers to neutralize the contamination, to increase groundwater flow through a contaminant zone in an aquifer to aid contaminant removal, to form hydraulic barriers to contain a contaminant plume or to re-inject treated groundwater from an on-site pump-and-treat system;

6.5.12 Wells used to discharge motor vehicle washwater that was used to wash only the exterior of vehicles;

6.5.13 Wells used to test new technologies, if the technology cannot be considered under an established well subclass (e.g., a pilot test related to geologic sequestration of carbon dioxide would be considered experimental, however, a well used for experimental bioremediation would be classified as aquifer remediation); and

6.5.14 Wells used to discharge wastewater resulting from a variety of commercial, industrial or institutional processes or activities (e.g. water from equipment washing, process and non-process cooling water, etc.).

6.6 Class VI wells are used to inject carbon dioxide (CO2) into underground subsurface rock formations for long-term storage, or geologic sequestration. Geologic sequestration refers to a suite of technologies that may be deployed to reduce CO2 emissions to the atmosphere to help mitigate climate change.

## **RULE 7. PROHIBITIONS**

7.1 No person shall construct, install, modify, repair, expand, operate, maintain or close a groundwater discharge system unless or until such activity is authorized in accordance with these rules.

7.2 No person shall discharge any wastewater or other fluid into or through a Class I, II or III injection well, as described in Rule 6.1- 6.3.

7.3 No person shall discharge any wastewater or other fluid into or through a Class IV well, as described in Rule 6.4, except as otherwise provided in Rule 10.1.2.

7.4 No person shall discharge any wastewater or other fluid through a floor drain or sink to a groundwater discharge system, if the discharge results from an activity or facility identified in Rule 7.4.1 through 7.4.3. Any existing floor drain or sink associated with these activities shall be closed in accordance with Rule 18.

7.4.1 Work area associated with a Motor Vehicle Waste Disposal Well, as described in Rule 5;

7.4.2 Manufacturing process or chemical use, storage or handling areas; or

7.4.3 Any facility located in the wellhead protection area of a community water supply well as defined in the RIDEM Groundwater Quality Rules.

7.5 No person shall commingle stormwater, sanitary wastewater or any other wastewater or unauthorized chemical or chemical product with a groundwater discharge authorized under these rules.

7.6 No person shall discharge to a groundwater discharge system any wastewater or other fluid containing a pollutant, except as otherwise provided in Rule 7.3, if the presence of that pollutant may cause or contribute to a violation of a primary drinking water regulation under the federal Safe Drinking Water Act or a groundwater quality standard established by the RIDEM Groundwater Quality Rules or which may adversely impact the groundwater resources of the State.

7.7 No person shall design, construct, install, locate, operate or close any groundwater discharge system in a manner that violates any State or federal law, rule, regulation or standard.

## **RULE 8. CONDITIONS FOR AUTHORIZATION**

8.1 The owner of a facility with a proposed groundwater discharge shall obtain authorization from the Director pursuant to these rules prior to construction and installation of a groundwater discharge system. Compliance with all requirements of a Groundwater or Stormwater Discharge System Registration or a Groundwater Discharge System Approval or Temporary Approval, and these rules, is required prior to commencement of any groundwater discharge system operation. The owner shall comply with any State or federal requirement that is more stringent than these rules, where applicable.

8.2 A Registration or Approval shall be issued only for those facilities in which the groundwater discharge system is designed, located, constructed, installed, operated and maintained so as to prevent adverse impact to the groundwater resources of the State or a violation of these rules or any other State or federal law, rule, regulation or standard.

8.3 A Registration or Approval issued pursuant to these rules shall not be construed to authorize any groundwater discharge that violates any requirement of these rules.

8.4 A Registration or Approval shall not be issued if the Director determines that another treatment or disposal method that affords better protection of the groundwater resources is reasonable and available.

8.5 A Registration or Approval issued pursuant to these rules shall not authorize any injury to persons or property or invasion of other property rights or any infringement of other State or federal law, rule, regulation or standard.

8.6 Any application or associated information submitted to the Director pursuant to these rules, with exception for Rule 18, and any required technical information or technical report subsequently submitted in support of an application pursuant to these rules that is significantly different from the original application, shall be prepared by or under the direction, and bear the seal, of a Professional Engineer (P.E.) registered with the Rhode Island State Board of Registration for Professional Engineers. A Professional Engineer registered in Rhode Island after December 31, 1994 must be registered as a Civil or Environmental Engineer.

8.7 Any application submitted to the Director pursuant to these rules shall be signed by the owner of the facility or as follows:

8.7.1 For a corporation: by a principal executive officer of at least the level of vice-president or a duly authorized representative of the facility. A person is a duly authorized representative of the facility and its owner(s) if the authorization is made in writing by the legal signatory, specifies an individual or position having responsibility for the overall operation or is submitted to the Director either prior to or with documents signed by the authorized representative;

8.7.2 For a partnership or sole proprietor: a general partner or proprietor or a representative authorized in writing by a general partner or proprietor, respectively; or

8.7.3 For a state, federal, municipal or quasi-public agency: an office director, department director or authorized representative thereof or ranking elected official.

8.8 <u>Applicable Fees</u>: Any application submitted to the Director pursuant to these rules shall be accompanied by an associated fee in accordance with the schedule set forth in Rule 19.

8.9 <u>Complete Application</u>: An application shall be considered complete when all required information has been submitted, including any application, report, plan, map, signature or any other information required by the application or the Director and all associated fees have been paid in accordance with Rule 19. The Director shall not consider any incomplete application for an activity regulated under these rules.

8.10 <u>Unacceptable Application</u>: When the Department determines that an application is unacceptable for any reason, the applicant has one year from the date of the unacceptable notice to correct all deficiencies identified by the Department. If all of the deficiencies are not corrected within one year from the date of the unacceptable notice, the applicant must submit a new application and application fee for any proposed activity subject to these rules.

8.11 <u>Other Information</u>: When the owner becomes aware that any relevant facts were not submitted in an application, report or other required submittal or that incorrect information was submitted in an application, report or other required submittal, such updated information shall be immediately submitted to the Director.

8.12 The owner shall comply at all times with the terms and conditions of a Registration or Approval issued pursuant to these rules.

8.13 The Director may, at any time, require the owner of a facility with a groundwater discharge system authorized under these rule to submit additional information to determine if the groundwater discharge has or may adversely impact the groundwater resources or cause or contribute to a violation of these rules.

8.14 The owner shall at all times maintain sufficient financial resources to allow for the proper closure of a groundwater discharge system in accordance with Rule 18. A surety bond may be required for submission with an application at the discretion of the Director.

8.15 <u>Termination of Approval</u>: A Registration or Approval may be terminated by the Director and subject to closure under Rule 18 for the following reasons:

8.15.1 Unauthorized or improper use of a groundwater discharge system;

8.15.2 Failure to comply with the Registration or Approval, these rules or any other applicable State or federal law, rule, regulation or standard; or

8.15.3 Where the Director has determined that the groundwater discharge has or may adversely impact the groundwater resources of the State or cause or contribute to a violation of these rules. The Director may halt construction and installation or operation of a groundwater discharge system upon receipt of information that the groundwater discharge may cause or contribute to a violation of a primary drinking water regulation under the federal Safe Drinking Water Act, a groundwater quality standard established by the RIDEM Groundwater Quality Rules or any other State or federal law, rule, regulation or standard, or which may adversely impact the groundwater resources.

8.16 <u>Unauthorized Discharge</u>: The owner of a groundwater discharge system that has been operating without a Department approval shall notify the Director and may be eligible to obtain a Registration or Approval under Rules 9 through 11 or may be required to cease the groundwater discharge and initiate closure activities in accordance with Rule 18.

8.17 <u>Considerations under Federal Law</u>: A Registration or Approval issued, or a closure completed, pursuant to these rules for a groundwater discharge described in Rules 6.4 - 6.6 shall contain conditions consistent with the requirements of applicable federal laws, rules, regulations and standards and shall constitute compliance with Part C of the federal Safe Drinking Water Act.

## **RULE 9. GROUNDWATER DISCHARGE SYSTEM REGISTRATION**

9.1 The owner of a facility with a proposed groundwater discharge identified in Rule 9.1.1 - 9.1.3 shall obtain a Groundwater Discharge System Registration prior to the initiation of construction and installation of a groundwater discharge system and shall comply with all requirements of Rule 9. Upon review of an application for registration, the Director may determine that due to the nature of the proposed groundwater discharge, the owner shall apply for and obtain a Groundwater Discharge Approval pursuant to Rule 10.

9.1.1 A groundwater discharge of wastewater or other fluid, including, but not limited to, Class V injection wells identified in Rule 6.5.1 - 6.5.8, which are associated with a commercial, industrial or institutional activity that does not have contact with any chemical process(es). Registration may be waived for a similar discharge to the ground surface where the Director has determined that the discharge will not result in an impact to groundwater resources or cause or contribute to a violation of these rules;

9.1.2 A groundwater discharge associated with open-loop geothermal activities at commercial, industrial or institutional facilities. The owner shall comply with the requirements of Rule 9.4 and 9.5; or

9.1.3 Any other groundwater discharge associated with an activity that the Director has determined may adversely impact the groundwater resources of the State.

9.2 <u>Application Requirements</u>: The owner shall submit to the Director, an Application for a Groundwater Discharge System Registration, prepared in accordance with Rule 8, and any other information required by the application or the Director, including at minimum, the following:

9.2.1 <u>Groundwater Elevation</u>: Notwithstanding a groundwater discharge identified in Rule 9.1.2, a determination of the seasonal high groundwater table elevation completed by:

(A) A Class IV Soil Evaluator licensed and conducted pursuant to the RIDEM Rules and Regulations Establishing Minimum Standards Relating to Location, Design, Construction and Maintenance for Onsite Wastewater Treatment Systems; or

(B) A Class IV Soil Evaluator or a Rhode Island Professional Engineer using the following general method: the collection of groundwater levels and other data from test holes located within 25 feet of the groundwater discharge system, pursuant to the wet season determination procedures in the RIDEM Rules and Regulations Establishing Minimum Standards Relating to Location, Design, Construction and Maintenance for Onsite Wastewater Treatment Systems.

9.2.2 <u>Setback and Separation Requirements</u>: The application shall identify where applicable, the following setback and separation distances from a proposed groundwater discharge system:

RECEPTOR	MINIMUM SETBACK (in feet)
Public Drinking Water Well (Sand & Gravel)	400
Public Drinking Water Well (Bedrock)	200
Surface Drinking Water Impoundment	200
All Other Surface Water	100
Private Drinking Water Well	100
On-Site Wastewater Treatment System	25
Other Groundwater Discharge System	25
Property Lines	10
Building Footing	10
Water Table (not applicable to geothermal return	3 feet vertical separation from the bottom of
flow wells and site-specific aquifer remediation	the infiltration system to the seasonal high
wells)	groundwater table

9.3 <u>Exemption from Registration</u>: The construction and installation of a residential open-loop geothermal system is exempt from the registration requirement under this rule. The owner of such system shall comply with the requirements in Rule 9.4.

9.4 <u>Open-Loop Geothermal Activities</u>: The owner of a groundwater discharge system identified in Rule 9.1.2 or 9.3 shall comply with the following:

9.4.1 All geothermal well construction and installation activities shall be conducted by a well driller registered or licensed pursuant to the Rhode Island Contractor's Registration and Licensing Board;

9.4.2 A Rhode Island Well Completion Report shall be submitted to the Director within 30 days of completion of construction and installation for each geothermal well; and

9.4.3 All geothermal well closure activities shall be completed pursuant to the RIDEM Groundwater Quality Rules.

9.5 <u>Analytical Characterization for Open-Loop Geothermal Activities</u>: The owner of a groundwater discharge system subject to 9.1.2 shall submit to the Director, prior to system start-up and no later than 30 days from the date of completion of construction and installation of the well(s), an analytical characterization of the groundwater quality at the location of the groundwater discharge system, as determined by the Director and performed in accordance with Rule 14.

9.6 The Director may, at any time, require the owner of a facility with a groundwater discharge system authorized under this rule to submit analytical characterization of a groundwater discharge, in accordance with Rule 14, or other information, to determine if the groundwater discharge has or may adversely impact the groundwater resources or cause or contribute to a violation of these rules. If the Director determines that the groundwater discharge or the groundwater discharge system characterized under Rule 9.5 or 9.6 does not meet the requirements for continued authorization under this rule, the owner, if eligible, may apply for a Groundwater Discharge System Approval under Rule 10 within 30 days of the determination or may be required to cease discharge and close the groundwater discharge system in accordance with Rule 18.4.

9.7 <u>Notification of Installation</u>: The owner shall submit a Notification of Completion of Construction and Installation to the Director within 30 days after completion of construction and installation of a groundwater discharge system, confirming that construction and installation has been completed in accordance with the approved application, associated plans and specifications and these rules.

9.8 <u>Expiration of Registration</u>: A Registration issued under Rule 9 for a groundwater discharge system that has not been constructed and installed shall expire 5 years from the date of issuance unless otherwise extended by a tolling period pursuant to Chapter 42-17.1-2.5 of the Rhode Island General Laws. Once a Registration is expired, a new application and application fee shall be submitted for any proposed activity subject to these rules.

9.9 <u>Proposed Changes</u>: Where addition, expansion or other modification as described in Rule 15 is proposed for a groundwater discharge system authorized under Rule 9, the owner shall submit to the Director an Application to Modify a Groundwater or Stormwater Discharge System and any other information required by the application or the Director. The Director may also require modification at any time, if new information that was not available at the time of issuance of a Groundwater Discharge System Registration would have justified the application of additional or different conditions.

9.10 <u>Closure Requirements</u>: Prior to closure of a groundwater discharge system authorized under Rule 9, the owner shall submit to the Director, a Notification of Termination of a Groundwater Discharge, in accordance with Rule 18.2, and any other information required by the Director.

9.11 <u>Unauthorized Discharge</u>: The owner of a groundwater discharge system that has been operating without a Department approval shall apply for a Groundwater Discharge Registration under Rule 9. If it is determined by the Director that the owner is not eligible for registration, the owner shall cease the groundwater discharge and initiate closure activities in accordance with Rule 18.3. Analytical characterization of the groundwater discharge system and/or surrounding groundwater may be required prior to obtaining a Registration under these rules.

#### RULE 10. GROUNDWATER DISCHARGE SYSTEM APPROVAL

10.1 The owner of a facility with a proposed groundwater discharge identified in Rule 10.1.1 - 10.1.3, shall obtain a Groundwater Discharge System Approval prior to the initiation of construction and installation of a groundwater discharge system and shall comply with all requirements of Rule 10.

10.1.1 A groundwater discharge of wastewater or other fluid, including, but not limited to Class V injection wells identified in Rule 6.5.11 - 6.5.14, which are associated with a commercial, industrial or institutional activity not eligible for registration under Rule 9;

10.1.2 A groundwater discharge of contaminated groundwater that has been treated and is being discharged into the same formation from which it was drawn, through a Class IV injection well, if the discharge is approved by the U.S. Environmental Protection Agency, or the Director, pursuant to the provision for the cleanup of releases under the federal Comprehensive, Environmental Response, Compensation and Liability Act of 1980 (CERCLA), 42 U.S.C 9601-9675 or pursuant to requirements and provisions under the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. 6901-6992k; or

10.1.3 Any other groundwater discharge associated with an activity that the Director has determined may adversely impact the groundwater resources of the State.

10.2 <u>Application Requirements</u>: Except as otherwise provided in Rule 10.3, the owner shall submit to the Director an Application for a Groundwater Discharge System Approval, prepared in accordance with Rule 8, and any other information required by the application or the Director, including at minimum, the following:

10.2.1 <u>Groundwater Elevation</u>: A determination of the seasonal high groundwater table elevation, conducted in accordance with Rule 9.2.1;

10.2.2 <u>Setback and Separation Distances</u>: Identification of the required setback and separation distances from the proposed groundwater discharge system, in accordance with Rule 9.2.2;

10.2.3 <u>Operation and Maintenance Plan</u>: A plan for the proper operation and maintenance of the groundwater discharge system containing:

(A) The name, address and daytime telephone number of the owner, operator or other representative responsible for maintenance of the groundwater discharge system;

(B) A schedule that ensures that the groundwater discharge system, including all treatment and infiltration systems, devices, structures and monitoring equipment shall be maintained in good operating order at all times as necessary to maintain optimal design performance;

(C) A schedule for the disposal of all material to be removed from the groundwater discharge system, indicating the frequency and method of disposal and subsequent submittal to the Director of manifests, bills of lading and/or disposal receipts, in accordance with applicable State and federal laws, rules, regulations and standards;

(D) A schedule for annual notification to the Director of any groundwater discharge system operational problem and spill or release of fluid that may have entered the groundwater discharge system during the previous 12-month period, including any incident reported under Rule 14.7-14.8; and

(E) A description of the immediate response activities to be performed in the event of a spill or release to the groundwater discharge system in accordance with Rule 14.8;

10.2.4 <u>Monitoring of Groundwater Discharge</u>: A proposal for characterization of the groundwater discharge at the site, including:

(A) A schematic indicating the location of the groundwater discharge sampling point(s);

(B) The frequency of groundwater discharge sampling and the applicable sampling parameters; and

(C) Any other pertinent information related to monitoring of the groundwater discharge;

10.2.5 <u>Monitoring of Groundwater</u>: A proposal for characterization of the ambient groundwater quality at the site, including:

(A) The construction and installation of a minimum of 3 groundwater monitoring wells: no less than one well located hydraulically up-gradient of the groundwater discharge system and no less than two wells located hydraulically down-gradient of the groundwater discharge system;

(B) The frequency of groundwater sampling and the applicable sampling parameters;

(C) A site plan indicating the location and identification number of each groundwater monitoring well; and

(D) Any other pertinent information related to groundwater quality monitoring at the site;

10.2.6 <u>Closure Plan</u>: A plan for closure of the groundwater discharge system, detailing the on-site activities and procedures that may be performed to complete closure of the system in accordance with Rule 18.2 in the event of termination of the groundwater discharge.

10.3 <u>Waiver of Application Submittal</u>: The Director shall waive the requirement to submit an application for a proposed groundwater discharge defined in Rule 6.4 and 6.5.11 and any similarly defined discharges to the ground surface, provided the groundwater discharge system subject to these rules is reviewed as part of an active waste clean-up activity at a site that is subject to approval by the RIDEM Office of Waste Management. The owner of a facility with a proposed groundwater discharge system that is eligible for an application waiver must be in compliance with all other applicable provisions of these rules. Approval from the RIDEM Office of Waste Management for such discharge shall constitute approval pursuant to these rules. This waiver shall also apply where addition, expansion or other modification is proposed for a groundwater discharge system subject to an Approval under these rules that has received such approval from the Office of Waste Management.

10.4 <u>Notification of Installation</u>: The owner shall submit to the Director within 30 days after completion of installation of a groundwater discharge system and groundwater monitoring wells subject to this rule, the following:

10.4.1 A Notification of Completion of Construction and Installation confirming that the construction and installation of the groundwater discharge system has been completed in accordance with the approved application and associated plans;

10.4.2 Groundwater monitoring well boring logs and construction and installation details.

10.5 <u>Notification of Operation</u>: The owner shall submit to the Director, a Notification of Commencement of a Groundwater Discharge within 30 days of the groundwater discharge system start-up.

10.6 <u>Analytical Characterization</u>: The owner shall submit to the Director within 30 days of the groundwater discharge system start-up, a complete set of compliance monitoring results as required by the Groundwater Discharge System Approval. All compliance monitoring required by a Groundwater Discharge System Approval or the Director shall be performed in accordance with Rule 14.

10.7 <u>Expiration of Approval</u>: An Approval issued under Rule 10 for a groundwater discharge system that has not been constructed and installed shall expire 5 years from the date of issuance unless extended by a tolling period pursuant to Chapter 42-17.1-2.5 of the Rhode Island General Laws. Once an Approval is expired, a new application and application fee shall be submitted for any proposed activity subject to these rules.

10.8 <u>Proposed Changes</u>: Where addition, expansion or other modification as described in Rule 15 is proposed for a groundwater discharge system authorized under Rule 10, the owner shall submit to the Director, an Application to Modify a Groundwater or Stormwater Discharge System and any other information required by the application or the Director. The Director may also require modification at any time, if new information that was not available at the time of issuance of a Groundwater Discharge System Approval would have justified the application of additional or different conditions. If at any time, the groundwater discharge or groundwater discharge system is modified to the extent that the analytical characterization or other measurement required by a Groundwater Discharge System Approval is incorrect or insufficient, a revised set of parameters shall be established by the Director.

10.9 <u>Other Information</u>: The Director may, at any time, require the owner of a facility with a groundwater discharge system authorized under this rule to submit additional information, including analytical characterization of groundwater, in accordance with Rule 14, or other information, to determine if the groundwater discharge has or may adversely impact the groundwater resources or cause or contribute to a violation of these rules. If the Director determines that the groundwater discharge or the groundwater discharge or the groundwater discharge and close the groundwater discharge system in accordance with Rule 18.4.

10.10 <u>Closure Requirements</u>: Prior to closure of a groundwater discharge system authorized under Rule 10, the owner shall submit to the Director, a Notification of Termination of a Groundwater Discharge, in accordance with Rule 18.2 and any other information required by the Director.

10.11 <u>Unauthorized Discharge</u>: The owner of a groundwater discharge system that has been operating without a Department approval shall apply for a Groundwater Discharge Approval under Rule 10. If it is determined by the Director that the owner is not eligible for approval, the owner shall cease the groundwater discharge and initiate closure activities in accordance with Rule 18.4. Analytical characterization of the groundwater discharge system and/or surrounding groundwater shall be required prior to obtaining an Approval under these rules.

#### **RULE 11. STORMWATER DISCHARGE SYSTEM REGISTRATION**

11.1 The owner of a facility with a proposed injection well identified in Rule 6.5.9 or a proposed stormwater discharge system shall obtain a Stormwater Discharge System Registration prior to initiation of construction and installation activities and shall comply with all requirements of Rule 11. The design, selection and placement of appropriate means of discharge and/or pretreatment for any stormwater discharge system regulated under Rule 11 shall adhere to the Rhode Island Stormwater Design and Installation Standards Manual. Notwithstanding the redevelopment definition in the Rhode Island Stormwater Design

and Installation Standards Manual, the requirements in this rule also apply to projects with a disturbed area of less than 10,000 square feet.

11.2 <u>Application Requirements</u>: The owner of a facility with a proposed stormwater discharge system not covered under Rules 11.3 – 11.5, shall submit to the Director, an Application for a Stormwater Discharge System Registration, prepared in accordance with Rule 8, and any other information required by the Rhode Island Stormwater Design and Installation Standards Manual or the Director.

11.3 <u>Exemption from Registration</u>: The following activities are exempt from registration under these rules:

11.3.1 Stormwater from a residential lot, which is infiltrated onto the same property, for any project proposed to infiltrate stormwater from <10,000 square feet of impervious area;

11.3.2 Stormwater from a land use that is not a Land Use of Higher Potential Pollutant Load (LUHPPL) that is delivered through permeable pavement, filtering systems or open channel systems provided that the practices are designed, installed and maintained in accordance with the Rhode Island Stormwater Design and Installation Standards Manual; or

11.3.3 Stormwater from a non-residential lot, which is infiltrated onto the same property, for any project proposed to infiltrate stormwater from <10,000 square feet of impervious area, provided that no stormwater is infiltrated from parking or driveway areas or areas defined as a LUHPPL in the Rhode Island Stormwater Design and Installation Standards Manual; or

11.3.4 Stormwater delivered through infiltration basins or surface infiltration trenches where the design is approved or deemed non-jurisdictional by RIDEM or the Rhode Island Coastal Resources Management Council (RICRMC) or the municipality before December 31, 2012 and the stormwater discharge system is installed prior to July 1, 2017.

11.4 <u>Waiver from Registration</u>: The requirement to apply for a Stormwater Discharge System Registration shall be waived for a stormwater discharge system subject to these rules that has received approval for such system from the RIDEM Pollutant Discharge Elimination System (RIPDES) Program, for those projects subject to a full RIPDES Program review, the Freshwater Wetlands Program or the Water Quality Certification Program. This waiver shall also apply where addition, expansion or other modification is proposed for a stormwater discharge system subject to a Registration under these rules that has received such approval from the RIDEM RIPDES, Freshwater Wetlands or Water Quality Certification programs.

11.5 <u>Automatic Registration</u>: A stormwater discharge system subject to these rules shall be deemed Registered upon submission by the owner of proof of Assent for such system issued by the RICRMC. Automatic registration shall also apply upon submission by the owner of proof of Assent for an addition, expansion or other modification to a stormwater discharge system subject to these rules that has received RICRMC approval for such activity.

11.6 The Director may, at any time, require the owner of a facility with a stormwater discharge system authorized under Rule 11 to submit additional information, including analytical characterization of a stormwater discharge, performed in accordance with Rule 14, to determine if the stormwater discharge has or may adversely impact the groundwater resources of the State or cause or contribute to a violation of these rules. If the Director determines that the stormwater discharge or the stormwater discharge system does not meet the requirements for continued authorization under this rule, the owner may be required to modify the system in accordance with Rule 15 or close the system in accordance with Rule 18.

11.7 <u>Notification of Installation</u>: The owner shall submit to the Director within 30 days after completion of construction and installation of a stormwater discharge system, a Notification of Completion of Construction

and Installation confirming that construction and installation has been completed in accordance with the approved application and associated plans.

11.8 <u>Expiration of Registration</u>: A Registration issued under Rule 11 for a stormwater discharge system that has not been constructed and installed shall expire 4 years from the date of issuance, unless otherwise extended by a tolling period pursuant to Chapter 42-17.1-2.5 of the Rhode Island General Laws. Once a Registration is expired, a new application and application fee shall be submitted for any proposed activity subject to these rules.

11.9 <u>Proposed Changes</u>: Where addition, expansion or other modification as described in Rule 15 is proposed to a stormwater discharge system authorized under Rule 11, the owner shall submit to the Director, an Application to Modify a Groundwater or Stormwater Discharge System and any other information required by the application or the Director. The Director may also require modification at any time if new information that was not available at the time of issuance of a Stormwater Discharge System Registration would have justified the application of additional or different conditions.

11.10 <u>Closure Requirements</u>: Prior to closure of a stormwater discharge system located below the ground surface and authorized under Rule 11, the owner shall submit to the Director, a Notification of Termination of a Groundwater Discharge, in accordance with Rule 18.2, and any other information required by the Director.

11.11 <u>Unauthorized Discharge</u>: The owner of a stormwater discharge system that infiltrates stormwater from a LUHPPL and has been operating without a Department approval shall apply for registration under Rule 11. If it is determined by the Director that the owner is not eligible for registration, the owner shall be required to cease the groundwater discharge and initiate closure activities in accordance with Rule 18.3. Analytical characterization of the groundwater discharge system and/or surrounding groundwater may be required prior to obtaining a Registration under these rules. The owner of a stormwater discharge system that was installed prior to July 12, 2012 and infiltrates stormwater from an area other than a LUHPPL shall not be required to obtain authorization under these rules.

## RULE 12. UIC PROGRAM REGISTRATION OR APPROVAL ISSUED PRIOR TO RULES

12.1 The owner of a facility with a groundwater discharge authorized under a Registration or Order of Approval issued by the RIDEM UIC Program prior to July 12, 2012 ("UIC Registration or Order of Approval") shall adhere to the terms and conditions required by the UIC Registration or Order of Approval, as issued, until such time as the groundwater discharge system is closed under these rules or the UIC Registration or Order of Approval is rescinded and a Stormwater Discharge System Registration or a Groundwater Discharge System Registration or Approval is reissued for the groundwater discharge. The owner of a facility authorized under a UIC Registration or Order of Approval shall be subject to all other applicable requirements of these rules.

12.2 <u>Monitoring and Reporting of Groundwater Quality</u>: All monitoring and reporting of groundwater discharge or groundwater quality shall be performed in accordance with the UIC Registration or Order of Approval for as long as the Registration or Order of Approval is in effect, unless otherwise required by the Director.

12.2.1 <u>Noncompliance</u>: The owner shall report to the Director any instance of noncompliance with a UIC Registration or Order of Approval in accordance with Rule 14.7 and 14.8; and

12.2.2 <u>Class IV Injection Wells</u>: If through analytical testing, a groundwater discharge system authorized under a UIC Registration or Order of Approval is determined to be a Class IV injection well

as defined in Rule 6.4, the owner shall immediately notify the Director and may be required to cease the groundwater discharge and initiate closure procedures in accordance with Rule 18.4.

12.3 <u>Proposed Changes</u>: Where addition, expansion or other modification as described in Rule 15 is proposed for a groundwater discharge system authorized under a UIC Registration or Order of Approval, the owner shall submit to the Director, an Application to Modify a Groundwater or Stormwater Discharge System and any other information required by the application or the Director. The Director may also require modification at any time, if new information that was not available at the time of issuance would have justified the application of additional or different conditions. If at any time, the groundwater discharge or groundwater discharge system is modified to the extent that the analytical characterization or other measurement required by a UIC Registration or Order of Approval is incorrect or insufficient, a revised set of parameters shall be established by the Director under a Groundwater Discharge Approval.

12.4 <u>Transfer of Ownership</u>: Upon anticipated change of ownership of a facility subject to a UIC Registration or Order of Approval, the existing facility owner, indicated in the most current Registration or Order of Approval shall initiate transfer of the approval to the new owner, unless closure of the groundwater discharge system is proposed. The existing owner shall submit to the Director, a Notification of Transfer of a Groundwater Discharge System Registration or Approval, and shall be responsible for compliance with the terms and conditions of the Registration or Approval until transfer of the subject facility is complete. Upon purchase of the facility, the new owner shall be responsible for compliance with the terms and conditions of approval. No person shall act under a Registration or Approval issued to another person.

12.5 <u>Conditions Preventing Transfer</u>: A UIC Registration or Order of Approval shall not be transferred if any of the following conditions apply:

12.5.1 The existing owner is not in compliance with the Registration or Order of Approval or these rules, unless the owner can demonstrate that transfer of the Registration or Order of Approval would facilitate returning the facility to compliance;

12.5.2 The existing owner has failed to pay any outstanding penalties or costs related to the property as required by the Director, unless any outstanding amount will be paid in conjunction with the transfer of the Registration or Order of Approval; or

12.5.3 The existing owner has failed to perform pursuant to a court order, consent decree, consent agreement or other settlement agreement relating to the facility subject to the Registration or Order of Approval, unless the owner can demonstrate that transfer of the Registration or Order of Approval would facilitate such performance.

12.6 <u>Temporary Cessation of Discharge</u>: The owner of a facility with a UIC Registration or Order of Approval shall submit to the Director, prior to implementation and in accordance with Rule 17, a Notification of Temporary Cessation of a Groundwater Discharge for any proposed interruption or cessation of a groundwater discharge that is planned or expected to extend greater than 120 days. An approval issued for temporary cessation of a groundwater discharge shall be granted in accordance with Rule 17.

12.7 <u>Closure Requirements</u>: Prior to closure of a groundwater discharge system authorized under a UIC Registration or Order of Approval, the owner shall submit to the Director, a Notification of Termination of a Groundwater Discharge, in accordance with Rule 18.2 and any other information required by the Director.

12.8 <u>Expiration of Registration or Approval</u>: A UIC Registration or Order of Approval shall expire if the groundwater discharge system has not been constructed and installed by July 1, 2020 unless otherwise extended by a tolling period pursuant to Chapter 42-17.1-2.5 of the Rhode Island General Laws. Once a UIC

Registration or Order of Approval is expired, a new application and application fee shall be submitted for any proposed activity subject to these rules.

## RULE 13. TEMPORARY GROUNDWATER DISCHARGE APPROVAL

13.1 The owner of a facility with a proposed groundwater discharge identified in Rule 10.1 may be eligible to apply for a Temporary Groundwater Discharge Approval ("Temporary Approval") for a pilot project or a groundwater discharge of limited duration that is non-seasonal in nature provided that the groundwater discharge and the groundwater discharge system meet all requirements of these rules. A groundwater discharge will not adversely impact the groundwater resources of the State or cause or contribute to a violation of these rules or any other State or federal law, rule, regulation or standard.

13.2 <u>Application Requirements</u>: The owner shall submit to the Director, an Application for a Groundwater Discharge System Approval, prepared in accordance with Rule 8, the requirements identified in Rule 10.2.1 - 10.2.6, as applicable, and any other information required by the application or the Director.

13.3 <u>Waiver of Application Submittal:</u> The Director shall waive the requirement to submit an application for a proposed groundwater discharge defined in Rule 6.4 and 6.5.11 and any similarly defined discharges to the ground surface, provided the groundwater discharge system subject to these rules is reviewed as part of an active waste clean-up activity at a site that is subject to approval by the RIDEM Office of Waste Management. The owner of a facility with a proposed groundwater discharge system that is eligible for an application waiver must be in compliance with all other applicable provisions of these rules. Approval from the RIDEM Office of Waste Management for such discharge shall constitute approval pursuant to these rules. This waiver shall also apply where addition, expansion or other modification is proposed for a temporary groundwater discharge system subject to an Approval under these rules that has received such approval from the Office of Waste Management.

13.4 <u>Notification of Installation</u>: The owner shall submit a Notification of Completion of Construction and Installation to the Director within 30 days after completion of construction and installation of a groundwater discharge system, confirming that construction and installation has been completed in accordance with the approved application and associated plans.

13.5 <u>Notification of Operation</u>: The owner shall submit to the Director, a Notification of Commencement of a Groundwater Discharge within 30 days of the groundwater discharge system start-up.

13.6 <u>Analytical Characterization</u>: The owner shall submit to the Director within 30 days of the groundwater discharge system start-up, a complete set of compliance monitoring results as required by the Temporary Approval. All compliance monitoring required by a Temporary Approval or the Director shall be performed in accordance with Rule 14.

13.7 <u>Duration of Approval</u>: A Temporary Approval issued in accordance with Rule 13 shall be nonrenewable and valid only as long as necessary and in no case longer than 180 days from the date of the groundwater discharge system start-up. If a separate Application for a Groundwater Discharge System Approval has been filed with the Director, in accordance with Rule 10 and prior to the date of expiration of the Temporary Approval, the period for which the Temporary Approval is valid may be extended to the date on which a decision on the application is rendered by the Director.

13.8 <u>Expiration of Approval</u>: An Approval issued under Rule 13 for a groundwater discharge system that has not been constructed and installed shall expire 5 years from the date of issuance unless extended by a tolling period pursuant to Chapter 42-17.1-2.5 of the Rhode Island General Laws. Once an Approval is

expired, a new application and application fee shall be submitted for any proposed activity subject to these rules.

13.9 <u>Proposed Changes</u>: Where addition, expansion or other modification as described in Rule 15 is proposed for a groundwater discharge system authorized under Rule 13, the owner shall submit to the Director, an Application to Modify a Groundwater or Stormwater Discharge System and any other information required by the application or the Director. The Director may also require modification at any time if new information that was not available at the time of issuance of a Temporary Approval would have justified the application of additional or different conditions.

13.10 <u>Closure Requirements</u>: Upon completion of a temporary groundwater discharge, the owner shall submit a Notification of Termination of a Groundwater Discharge, prepared in accordance with Rule 18.2, and any other information required by the Director.

## RULE 14. COMPLIANCE MONITORING OF A GROUNDWATER DISCHARGE

14.1 The owner of a facility subject to compliance monitoring requirements that include measurements, reports or characterization of a groundwater discharge or groundwater quality shall submit to the Director, the information required by a Groundwater Discharge System Registration, Approval, Temporary Approval or other Department requirement, no later than 30 days after the sampling collection date, unless otherwise specified by the Director.

14.2 <u>Analytical Characterization</u>: A representative sample collected for analytical characterization of a groundwater discharge, groundwater quality or other matrixes, as a condition of a Groundwater Discharge System Registration, Approval, Temporary Approval or other Department requirement, shall be analyzed by a laboratory certified by the Rhode Island Department of Health pursuant to the Rules and Regulations for Licensing Clinical Laboratories and Stations or by the National Environmental Laboratory Accreditation Program (NELAP), as appropriate.

14.3 <u>Proper Operation and Maintenance</u>: The owner shall at all times operate and maintain in good working order, a groundwater discharge system, groundwater monitoring well or other device or system of treatment and control and related appurtenance installed or used to achieve compliance with a Groundwater Discharge System Registration, Approval, Temporary Approval or other Department requirement . The owner shall submit any update to the approved Operation and Maintenance Plan to the Director, as appropriate.

14.4 <u>Groundwater Monitoring Wells</u>: Any required groundwater monitoring well shall be designed, constructed, installed and decommissioned pursuant to the RIDEM Groundwater Quality Rules. The owner shall operate and maintain all groundwater monitoring wells, piezometers and other measurement, sampling and analytical devices in a manner to ensure the performance of design specifications throughout the life of the monitoring program.

14.5 <u>Monitoring and Reporting of Groundwater Discharge</u>: All monitoring and reporting of a groundwater discharge shall be performed in accordance with the Groundwater Discharge System Approval, Temporary Approval or other Department requirement. An analytical monitoring report subsequently submitted to the Director shall include:

14.5.1 Sample description(s);

14.5.2 Identification of the specific location of the sample collection point(s). Any modification to a sampling location identified in a Groundwater Discharge System Registration, Approval, Temporary Approval or other Department requirement shall require prior approval from the Director and shall be noted in the monitoring report;

14.5.3 The name of the individual who performed the sampling or measurement and the sample collection method used;

14.5.4 The exact date, time and place of each sampling or measurement;

14.5.5 The date the analysis was performed and the analytical technique or method used;

14.5.6 The performing laboratory certification number issued by Rhode Island Department of Health;

14.5.7 Documentation of the proper chain of custody for the required sample(s); and

14.5.8 The Certificate of Analysis from the performing laboratory and the results of such analysis (laboratory reporting sheets).

14.6 <u>Monitoring and Reporting of Groundwater Quality</u>: All monitoring and reporting of groundwater quality shall be performed in accordance with the Groundwater Discharge System Registration, Approval, Temporary Approval or other Department requirement. An analytical monitoring report subsequently submitted to the Director shall include:

14.6.1 The information identified in Rule 14.5.1 - 14.5.8;

14.6.2 A post-construction site plan of the facility, drawn to scale, no larger than 11 inches by 17 inches, identifying the location of:

(A) Any buildings at the site, property boundary lines, the abutting street with the nearest utility pole number and a north arrow;

(B) Any groundwater monitoring well(s) and the top of casing elevation for each well;

(C) Any groundwater discharge system and drinking water supply well at the site;

(D) Any neighboring private drinking water well or public water supply within 400 feet of the groundwater discharge system;

14.6.3 The elevation of groundwater in the monitoring well(s) at the time of sample collection; and

14.6.4 The direction of groundwater flow.

14.7 The owner shall notify the Director at the time of occurrence, any instance of noncompliance with a Groundwater Discharge System Registration, Approval, Temporary Approval or other Department requirement, including any monitoring and reporting or operation and maintenance condition which has or may adversely impact the groundwater resources of the State or cause or contribute to a violation of these rules.

14.8 The owner shall also submit a written report to the Director within 7 days of the occurrence of any noncompliance with a Groundwater Discharge System Registration, Approval, Temporary Approval or other Department requirement, as identified in accordance with Rule 14.7, and shall initiate action to correct, minimize or prevent such violation within a specified period of time as determined by the Director, including:

14.8.1 Resample and characterize the groundwater discharge or the groundwater quality;

14.8.2 Modify the facility operation or process(es) associated with the groundwater discharge;

14.8.3 Suspend operation of the groundwater discharge system until compliance is attained;

14.8.4 Close the groundwater discharge system in accordance with Rule 18 and seek an alternate waste disposal method; or

14.8.5 Any other means of corrective action required by the Director.

14.9 <u>Class IV Injection Wells</u>: Notwithstanding a groundwater discharge system eligible for approval under Rule 10.1.2 or subject to waiver under Rule 10.3, if a groundwater discharge system is determined through analytical testing to be a Class IV injection well as defined in Rule 6.4, the owner shall immediately notify the Director and may be required to cease the groundwater discharge and initiate closure procedures in accordance with Rule 18.4.

#### RULE 15. MODIFICATION OF A GROUNDWATER DISCHARGE SYSTEM

15.1 The owner of a facility operating under a Groundwater or Stormwater Discharge System Registration, Groundwater Discharge System Approval or Temporary Approval shall obtain a modification of the Registration or Approval prior to the initiation of any addition, expansion or other modification or condition related to the groundwater discharge or the groundwater discharge system, including, but not limited to:

15.1.1 A change to the type or quality of wastewater or other fluid discharged to the groundwater discharge system;

15.1.2 A change to the quantity of wastewater or other fluid discharged to the groundwater discharge system;

15.1.3 A change to the approved groundwater discharge system piping or other devices or system of treatment and control and related appurtenances, including a change in placement location; or

15.1.4 A minor modification as described in Rule 15.5.

15.2 The Director shall also require modification of a Registration or Approval under the following conditions:

15.2.1 The identification of any information that indicates the approved groundwater discharge has caused or contributed or may cause or contribute to a violation of a primary drinking water regulation under the federal Safe Drinking Water Act or a groundwater quality standard established by the RIDEM Groundwater Quality Rules or any other State or federal law, rule, regulation or standard; or

15.2.2 The identification of new information that was not available at the time of issuance that would have justified the application of additional or different conditions in the Registration or Approval.

15.3 <u>Application Requirements</u>: The owner shall submit to the Director an Application to Modify a Groundwater or Stormwater Discharge System, prepared in accordance with Rule 8, and any other information required by the application or the Director.

15.4 If at any time, a groundwater discharge or groundwater discharge system is modified to the extent that the analytical characterization or other measurement required by a Groundwater Discharge System Approval

or Temporary Approval is incorrect or insufficient, a revised set of parameters shall be established by the Director in accordance with the Approval and these rules.

15.5 A modification shall be considered minor in order to:

15.5.1 Correct significant or meaningful typographical errors;

15.5.2 Decrease the frequency of compliance monitoring and reporting of a groundwater discharge or groundwater quality. The Director may modify a Groundwater Discharge System Approval or Temporary Approval to decrease the frequency of monitoring and reporting only if it is determined that the discharge has not changed, the historic facility monitoring data demonstrates such consistency and the continued level of monitoring will not provide additional relevant information; or

15.5.3 Change requirements related to construction and installation of a groundwater discharge system if the change complies with the requirements of these rules.

15.6 The filing, by the owner, of an Application to Modify a Groundwater or Stormwater Discharge System does not stay any condition of a Groundwater or Stormwater Discharge System Registration, Approval or Temporary Approval.

## RULE 16. TRANSFER OF OWNERSHIP OF A GROUNDWATER DISCHARGE SYSTEM

16.1 Upon anticipated change of ownership of a facility subject to a Groundwater Discharge System Registration or Approval or a Temporary Approval, the existing facility owner, indicated in the most current Registration or Approval shall initiate transfer to the new owner, unless closure of the groundwater discharge system is proposed. The existing owner is responsible for compliance with the terms and conditions of the Groundwater Discharge System Registration, Approval or Temporary Approval until transfer of the subject facility is complete. Upon purchase of the facility, the new owner shall be responsible for compliance with the terms and conditions of the Groundwater Discharge System Registration, Approval or Temporary Approval issued to another person.

16.2 <u>Notification Requirements</u>: The existing owner shall submit to the Director, at least 30 days prior to the date of facility transfer, a Notification of Transfer of a Groundwater Discharge System Registration or Approval and any other information required by the Director. The Notification shall include a written agreement between the existing and new owner indicating:

16.2.1 The anticipated date of facility transfer;

16.2.2 Acknowledgement that the responsibility, coverage and liability associated with the Registration or Approval or Temporary Approval shall transfer upon recordation of the property deed; and

16.2.3 Acknowledgement that the new owner has reviewed the Groundwater Discharge System Registration or Approval or Temporary Approval and has agreed to comply with all terms and conditions contained therein upon the facility transfer.

16.3 <u>Proposed Changes</u>: Any proposed change to the groundwater discharge or to the groundwater discharge system must be noted in the Notification of Transfer of a Groundwater Discharge System Registration or Approval and may require modification to the Groundwater Discharge System Registration or Approval or Temporary Approval in accordance with Rule 15, or submission of a new application for a Groundwater Discharge System Registration or Approval under Rule 9 or Rule 10.

16.4 <u>Conditions Preventing Transfer</u>: A Groundwater Discharge System Registration or Approval or Temporary Approval shall not be transferred if any of the following conditions apply:

16.4.1 The existing owner is not in compliance with the Groundwater Discharge System Registration or Approval, Temporary Approval or these rules, unless the owner can demonstrate that transfer of the approval would facilitate returning the facility to compliance;

16.4.2 The existing owner has failed to pay any outstanding penalties or costs related to the facility as required by the Director, unless any outstanding amount will be paid in conjunction with the transfer of the Registration or Approval or Temporary Approval; or

16.4.3 The existing owner has failed to perform pursuant to a court order, consent decree or other settlement agreement relating to the facility subject to the Groundwater Discharge System Registration or Approval or Temporary Approval, unless the owner can demonstrate that transfer of the Registration or Approval or Temporary Approval would facilitate such performance.

#### RULE 17. TEMPORARY CESSATION OF A GROUNDWATER DISCHARGE

17.1 <u>Notification of Temporary Cessation</u>: The owner of a facility with a groundwater discharge authorized under Rule 9 or Rule 10, shall submit to the Director, prior to implementation, a Notification of Temporary Cessation of a Groundwater Discharge for any proposed interruption or cessation of a groundwater discharge that is planned or expected to extend greater than 120 days, and shall include:

17.1.1 The reasons for the interruption or cessation of groundwater discharge;

17.1.2 The estimated time frame when the groundwater discharge will cease and be re-started; and

17.1.3 An acknowledgment that any required monitoring of a groundwater discharge, associated with a Groundwater Discharge System Approval will resume when the groundwater discharge is re-started.

17.2 <u>Groundwater Monitoring and Reporting</u>: All groundwater quality monitoring shall continue, as applicable, in accordance with the monitoring and reporting schedule established in a Groundwater Discharge System Approval or as otherwise required by the Director.

17.3 <u>Duration of Approval</u>: An approval issued for temporary cessation of a groundwater discharge in accordance with Rule 17 shall be granted for a one year period. After that time, the owner may submit annually, a request pursuant to Rule 17.1, for a one year extension of the temporary cessation of groundwater discharge until such time that the reason for interruption or cessation is no longer valid (e.g. completion of transfer of the Groundwater Discharge System Registration or Approval or Temporary Approval, modification of the groundwater discharge or the groundwater discharge system or closure of the groundwater discharge system).

#### RULE 18. CLOSURE OF A GROUNDWATER DISCHARGE SYSTEM

18.1 The owner shall close a groundwater discharge system that is abandoned, no longer in use or required to be closed by the Director, in a manner that prevents adverse impact to the groundwater resources of the State in accordance with all requirements of these rules. This applies to any groundwater discharge system subject to these rules, whether unauthorized or operating under a Groundwater Discharge System Registration or Approval, Temporary Approval or a UIC Registration or Approval issued prior to July 12, 2012. A groundwater discharge system that was installed without approval from the Director and where the

owner does not intend or is not eligible to apply under these rules for a Registration or Approval to continue to operate, shall be closed in accordance with Rule 18.

18.2 <u>Notification of Termination for Authorized Discharges</u>: Prior to the initiation of any closure activities, the owner of a groundwater discharge system authorized under these rules or under a UIC Registration or Order of Approval issued prior to July 12, 2012 shall submit to the Director, a Notification of Termination of a Groundwater Discharge and any other information required by the Director. Analytical characterization of soil and/or groundwater at the site may be required following cessation of the groundwater discharge to demonstrate compliance with these rules.

18.3 <u>Unauthorized Discharge Subject to Registration</u>: Prior to the initiation of any closure activities, the owner of a groundwater discharge system subject to Registration under Rule 9 or a stormwater discharge system subject to Rule 11 that is associated with a LUHPPL (as defined by the Rhode Island Stormwater Design and Installation Standards Manual) that has been operating without Department authorization shall notify the Director to determine if Notification of Termination under Rule 18.2 is an available option or if closure of the groundwater discharge system is required in accordance with Rule 18.4.

18.4 <u>Application Requirements</u>: Except as otherwise provided in Rule 18.6, prior to the initiation of any closure activities, the owner of a facility that has been operating a groundwater discharge system identified in Rule 18.4.1 - 18.4.4 shall submit to the Director, an Application for Closure of a Groundwater Discharge System, prepared in accordance with Rule 8, the supporting information listed in Rule 18.5, and any other information required by the application or the Director:

18.4.1 A groundwater discharge that through analytical testing conducted in accordance with a Groundwater Discharge Registration or Approval or Temporary Approval or other Department requirement has been characterized as having adversely impacted the groundwater resources of the State;

18.4.2 A groundwater discharge system subject to Rule 18.3 that is not eligible for closure under Notification of Termination of a Groundwater Discharge;

18.4.3 A groundwater discharge system subject to approval under Rule 10 that has been operating without Department authorization and is not eligible for approval under Rule 10.11;

18.4.4 A groundwater discharge operating without Department authorization that through analytical testing conducted in accordance with Rule 9.6, Rule 11.6 or other Department requirement has been characterized as having adversely impacted the groundwater resources of the State;

18.4.5 A groundwater discharge system operating without Department authorization that has been characterized in accordance with Rule 12.2.2 or Rule 14.9 as having received and/or discharged hazardous wastewater through a Class IV well, as identified in Rule 6.4.

18.5 The owner of a groundwater discharge system subject to closure requirements under Rule 18.4 shall complete the following:

18.5.1 <u>Pre-Closure Notification</u>: Upon Department approval of the Application for Closure of a Groundwater Discharge System, the owner shall notify the Director at least 10 business days prior to the initiation of any on-site activities related to closure of the groundwater discharge system, unless otherwise specified. All closure activities shall be performed as outlined in the application and associated closure plan, as approved.

18.5.2 <u>Material Handling</u>: The owner shall ensure that:

(A) Any sample of soil, sludge or liquid collected as required for completion of groundwater discharge system closure activities shall be analyzed pursuant to the parameters and testing methodologies specified by the Director and performed in accordance with Rule 14.2;

(B) Any soil, sludge or liquid removed from or adjacent to the groundwater discharge system shall be managed pursuant to all applicable State and federal laws, rules, regulations or standards; and

(C) Any required groundwater monitoring well(s) shall be designed, constructed, installed and decommissioned pursuant to the RIDEM Groundwater Quality Rules. The owner shall operate and maintain all groundwater monitoring wells, piezometers and other measurement, sampling and analytical devices in a manner to ensure the performance of design specifications throughout the duration of the monitoring program.

18.5.3 <u>Post-Closure Report</u>: The owner shall submit to the Director, within 30 days of completion of closure activities, a Groundwater Discharge System Closure Report, including:

(A) A narrative description of all completed activities related to closure of the groundwater discharge system;

(B) An analytical monitoring report including all information identified in Rule 14.5.1-14.5.8;

(C) Any manifest or disposal receipt associated with the removal of any contaminated soil, sludge or liquid generated by closure activities;

(D) Photographic documentation of the closure activities performed, including the final excavation pit(s), any structure(s) excavated and any stockpile(s) of generated material;

(E) A proposal for any additional soil or groundwater remediation, if necessary; and

(F) Any other information related to the groundwater discharge system closure.

18.5.4 If information contained in the Groundwater Discharge System Closure Report indicates that site conditions have or may adversely impact the groundwater resources of the State or cause or contribute to a violation of these rules, the Director may require the owner to initiate additional corrective action at the site. The Director may also provide the owner with the option to record a land use restriction in lieu of all, or a portion, of the additional corrective action activities required by the Director.

18.5.5 <u>Post-Closure Monitoring</u>: The Director may require groundwater quality monitoring or other post-closure activities as deemed necessary. Any required groundwater quality monitoring and reporting shall be conducted in accordance with Department requirements and Rule 14.

18.5.6 The owner shall decommission all groundwater monitoring devices upon completion of closure activities, in accordance with the RIDEM Groundwater Quality Rules unless continued monitoring of the groundwater quality is required by the Director.

18.6 The Director shall waive the requirement to submit an Application for Closure of a Groundwater Discharge System listed under Rule 18.4.2 - 18.4.5, provided that the groundwater discharge system subject to these rules is closed as part of an active waste clean-up activity at a site that is subject to approval by the

RIDEM Office of Waste Management. The owner of a facility with a groundwater discharge system that is eligible for an application waiver must be in compliance with all other applicable provisions of these rules. Approval from the RIDEM Office of Waste Management for these closures shall constitute approval pursuant to these rules.

## **RULE 19. APPLICATION FEES**

A nonrefundable fee shall accompany each application as required under these rules in accordance with the schedule below:

TYPE OF APPLICATION OR NOTIFICATION	FEE
Application for a Groundwater Discharge System Registration	\$400.00
Application for a Groundwater Discharge System Approval*	\$1000.00
(Temporary Groundwater Discharge)**	\$250.00
Application for a Stormwater Discharge System Registration	\$400.00
Application to Modify a Groundwater or Stormwater Discharge System	\$200.00
(Minor Modification)	\$100.00
Notification of Ownership Transfer for a Groundwater Discharge System	\$100.00
Application for Closure of a Groundwater Discharge System	\$500.00

\* includes review of compliance monitoring data for the duration of the approval

\*\* fee can apply toward a new Application for a Groundwater Discharge System Approval, as applicable

## **RULE 20. ENFORCEMENT**

20.1 Where the Director has determined that any condition exists in violation of a Registration or Approval issued pursuant to these rules, a UIC Registration or Order of Approval issued prior to July 12, 2012 or any other requirement of these rules, the owner shall cease operation or if applicable, the portion of the operation relevant to the violation. If the Director determines that an order of cessation shall not completely abate the condition that caused or contributed to the violation, the owner shall initiate further investigation and/or remediation activities in accordance with Department requirements.

20.2 Where the Director determines that a pattern of violations of any condition in a Registration or Approval issued pursuant to these rules, a UIC Registration or Order of Approval issued prior to July 12, 2012 or any other requirement of these rules, exists or has existed and that the violations are caused by the failure of the owner to comply or that the violations are willfully caused by the owner, the Director shall terminate the Registration or Approval unless the owner can show cause as to why the Registration or Approval should not be terminated.

20.3 Pursuant to R. I. General Laws Chapter 42-17-1-2 (21) and in consideration of the administrative appeals process under Rule 21 and R.I. General Laws Chapter 42-35-1, et seq., the Superior Court of Providence County shall have jurisdiction in equity to enforce the provisions of these rules or any order issued pursuant thereto. Proceedings for enforcement shall be instituted and prosecuted in the name of the Director, and in such proceeding in which injunctive relief is sought, it shall not be necessary for the Director to show that without such relief the injury which will result will be irreparable or that the remedy at law is inadequate.

## **RULE 21. APPEALS**

Any person affected by a decision of the Director pursuant to these rules may file a claim for an adjudicatory hearing to review the decision in accordance with the RIDEM Administrative Rules of Practice and

Procedure for the Administrative Adjudication Office for Environmental Matters. Any appeal shall be in writing and shall be filed with and received by the RIDEM Administrative Adjudication Office within 30 days of the effective date of the denial of the subject application or action. The party appealing a Department decision shall bear the burden of proving that their application or action is in compliance with all requirements of these rules and regulations.

### **RULE 22. SUPERSEDED RULES AND REGULATIONS**

On the effective date of these rules, all previous rules for the discharge of non-sanitary wastewater and other fluid to or below the ground surface shall be superseded. Any enforcement action taken by, or application submitted to, the Department prior to the effective date of these rules and regulations shall be governed by the rules and regulations in effect at the time the enforcement action was taken or application filed.

#### **RULE 23. SEVERABILITY**

If any provision of these rules or the application thereof to any person or circumstance is held invalid by a court of competent jurisdiction, the validity of the remainder of the rules shall not be affected thereby.

## **RULE 24. PENALTIES**

Any person who violates any provision of these rules shall be subject to the penalties assessed pursuant to the RIDEM Rules and Regulations for the Assessment of Administrative Penalties. Failure to comply with the terms and conditions of a Registration or Approval issued pursuant to these rules or any other requirement of these rules may constitute a violation of the federal Safe Drinking Water Act.

## **RULE 25. EFFECTIVE DATE**

The foregoing "Rules for the Discharge of Non-Sanitary Wastewater and Other Fluid to or Below the Ground Surface," after due notice, are hereby adopted and filed with the Secretary of State this \_\_\_\_\_\_ day of October 2014, to become effective 20 days thereafter, pursuant to the provisions of Chapters 42-35, 42-17.1, 42-17.6, 46-12 and 46-13.1 of the General Laws of Rhode Island of 1956, as amended.

Janet Coit	
Director, Department of Environmental Management	

Public Notice Date:

Filing Date:

Effective Date: