

RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
PERMITS SECTION
235 PROMENADE STREET
PROVIDENCE, RHODE ISLAND 02908-5767

PUBLIC NOTICE OF PROPOSED PERMIT ACTIONS UNDER THE RHODE ISLAND POLLUTANT DISCHARGE ELIMINATION SYSTEM (RIPDES) PROGRAM WHICH REGULATES DISCHARGES INTO THE WATERS OF THE STATE UNDER CHAPTER 46-12 OF THE RHODE ISLAND GENERAL LAWS OF 1956, AS AMENDED.

DATE OF NOTICE: Monday, December 15, 2025

PUBLIC NOTICE NUMBER: PN-25-08

DRAFT RIPDES PERMITS

RIPDES PERMIT NUMBER: **RI0023485**

NAME AND MAILING ADDRESS OF APPLICANT:

Metals Recycling, LLC
69 Rover Street
Everett, MA 02149.

NAME AND ADDRESS OF FACILITY WHERE DISCHARGE OCCURS:

Metals Recycling, LLC
89 Celia Street
Johnston, RI 02919

RECEIVING WATER: **Woonasquatucket River and Tributaries (Waterbody ID#: RI0002007R-10C)**

RECEIVING WATER CLASSIFICATION: **B1**

The facility is located in Johnston and is engaged in scrap recycling and storage. The discharge consists of stormwater from the facility and its associated parking and storage areas. Stormwater enters the stormwater treatment system and is ultimately discharged to the Woonasquatucket River. When the facility is operating, activities include processing, separating, sorting, and stockpiling scrap metal and associated by-products. As part of these operations, automobiles are transported to the facility, any hazardous materials and automotive fluids are removed from the vehicles, the vehicles are shredded, and the shredded materials are sorted prior to being transported off-site for further processing. In accordance with Rule 32(b)(3)(I)(A) of the RIPDES Regulations, it has been determined that the facility is a significant contributor of pollutants and has, therefore, been

required to obtain an individual RIPDES permit. The facility has reapplied to the Rhode Island Department of Environmental Management for reissuance of an individual RIPDES permit to authorize discharge from the facility through Outfall 001A. This permit includes benchmarks and an effluent limit to ensure that the discharge will not cause a water quality violation. It requires that the facility maintain a Stormwater Pollution Prevention Plan (SWPPP) to manage stormwater treatment system and other pollution controls. Benchmark exceedances shall trigger a review of the facility's SWPPP and the implementation of the appropriate corrective actions. Effluent limit exceedances shall trigger a review of the facility's SWPPP, the implementation of appropriate corrective actions, and possible compliance actions. The draft permit contains new requirements for corrective actions, updated benchmark values, and new monitoring periods.

The DEM has determined that the proposed activities comply with the Policy on the Implementation of the Antidegradation Provisions of the Rhode Island Water Quality Regulations (250-RICR-150-1) and that existing uses will be maintained and protected. A detailed evaluation of the water quality impact from the proposed activities and any important benefits demonstrations, if required, may be found in the statement of which is available as noted below.

RIPDES PERMIT NUMBER: **RI0023736**

NAME AND MAILING ADDRESS OF APPLICANT:

Fox Island LLC
50 Park Row West, Suite 113
Providence, RI 02903

NAME AND ADDRESS OF FACILITY WHERE DISCHARGE OCCURS:

Fox Island
North Kingstown, RI 02852

RECEIVING WATER: **West Passage of Narragansett Bay (Waterbody ID#RI0007027E-03A)**

RECEIVING WATER CLASSIFICATION: **SA**

The facility, which is the source of the discharge, is an individual residence and catering building located on Fox Island. The applicant has installed a package desalination system at a residential home located on Fox Island with the sole purpose of providing potable water for the main residence and catering building to supplement water from the existing shallow fresh water well. The proposed desalination unit is owned and operated by the applicant, who is also the homeowner, and is located at Fox Island off the coast of North Kingstown, Rhode Island. The discharge to the West Passage of Narragansett Bay consists of brine that has been concentrated by the reverse osmosis desalination system. The permit preserves conditions that require the permittee to maintain a logbook to document reverse osmosis system operation and maintenance activities, and

to implement standard operating procedures for the reverse osmosis system's annual winterization process and other maintenance activities.

FURTHER INFORMATION:

A statement of basis (describing the type of facility and significant factual, legal and policy questions considered in these permit actions) may be obtained at no cost by writing or calling DEM as noted below:

Ekaterini Papazekos, EIT, Environmental Engineer I
Rhode Island Department of Environmental Management
Office of Water Resources
235 Promenade Street
Providence, Rhode Island 02908-5767
(401) 537-4036
Email: ekaterini.papazekos@dem.ri.gov

The administrative record containing all documents relating to these permit actions is on file and may be inspected, by appointment, at the DEM's Providence office mentioned above between 8:30 a.m. and 4:00 p.m., Monday through Friday, except holidays.

PUBLIC COMMENT AND REQUEST FOR PUBLIC HEARING:

Pursuant to Chapter 42-17.4 of the Rhode Island General Laws a public hearing has been scheduled to consider these permits if requested. Requests for a Public Hearing must be submitted in writing to the attention of Ekaterini Papazekos as indicated above. Notice should be taken that if DEM receives a request from twenty-five (25) people, a governmental agency or subdivision, or an association having no less than twenty-five (25) members on or before 4:00 p.m., Thursday, January 15, 2026, a public hearing will be held at the following time and place:

6:00 PM Thursday, January 22, 2026
Room 280
235 Promenade Street
Providence, Rhode Island 02908

Interested persons should contact DEM to confirm if a hearing will be held at the time and location noted above.

235 Promenade Street is accessible to individuals who are handicapped. If communication assistance (readers/interpreters/captioners) is needed, or any other accommodation to ensure equal participation, please call Ekaterini Papazekos or RI Relay 711 at least forty-eight (48) hours prior to the meeting so arrangements can be made to provide such assistance at no cost to the person requesting.

Interested parties may submit comments on the permit actions and the administrative record to the address above no later than 4:00 p.m. on Friday, January 23, 2026.

If, during the public comment period, significant new questions are raised concerning any of the permits, DEM may require a new draft permit or statement of basis or may reopen the public comment period. A public notice will be issued for any of these actions.

Any person, including the permittee/applicant, who believes these permit actions are inappropriate, must raise all reasonably ascertainable issues and submit all reasonably available arguments and factual grounds supporting their position, including all supporting material, by the close of the public comment period under 250-RICR-150-10-1.42 of the Regulations for the Rhode Island Pollutant Discharge Elimination System. The public comment period is from Monday, December 15, 2025 to Friday, January 23, 2026. Commenters may request a longer comment period if necessary to provide a reasonable opportunity to comply with these requirements. Comments should be directed to DEM as noted above.

FINAL DECISION AND APPEALS:

Following the close of the comment period, and after a public hearing, if such hearing is held, the Director will issue a final decision and forward a copy of the final decision to the permittee and each person who has submitted written comments or requested notice. Within 30 days following the notice of the final decision, any interested person may submit a request for a formal hearing in accordance with the requirements of 250-RICR-150-10-1.50 of the Regulations for the Rhode Island Pollutant Discharge Elimination System.

11 December 2025

Date

Heidi Travers

Heidi Travers, P.E.

Environmental Engineer IV

RIPDES, Office of Water Resources

Department of Environmental Management

AUTHORIZATION TO DISCHARGE UNDER THE
RHODE ISLAND POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of Chapter 46-12 of the Rhode Island General Laws, as amended,

Metals Recycling, LLC
69 Rover Street
Everett, MA 02149.

is authorized to discharge from a facility located at

Metals Recycling, LLC
89 Celia Street
Johnston, RI 02919

to receiving waters named

Woonasquatucket River and Tributaries

in accordance with effluent limitations, monitoring requirements and other conditions set forth herein.

This permit shall become effective on _____.

This permit and the authorization to discharge expire at midnight, five (5) years from the effective date.

This permit supersedes the permit that became effective on April 1, 2015.

This permit consists of 21 pages in Part I including effluent limitations, monitoring requirements, etc. and eight (8) pages in Part II including General Conditions.

Signed this _____ day of _____ 2025.

DRAFT

Joseph B. Haberek, P.E., Administrator of Surface Water Protection
Office of Water Resources
Rhode Island Department of Environmental Management
Providence, Rhode Island

I.A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

I.A.1 During the period beginning on the effective date and lasting through permit expiration, the permittee is authorized to discharge from outfall serial number 001A (discharge from the Stormwater Collection and Treatment System Located at Manhole MH-1T). The permittee shall monitor the discharges from Outfall 001A at MH-5T as specified below. MH-1T and MH-5T are identified in Metals Recycling LLC's 2024 Comprehensive Site Evaluation Report.

Effluent Characteristic	Discharge Limitations					Monitoring Requirement	
	Quantity – lbs./day		Concentration – Specify Units			Measurement Frequency	Sample Type
	Average Monthly	Maximum Daily	Average Monthly	Minimum	Maximum		
Flow	--- GPD	--- GPD				1/Day	Calculated ¹
COD				--- mg/L	--- mg/L	2 Samples/6-Months ³	Grab ²
TSS				--- mg/L	--- mg/L	2 Samples/6-Months ³	Grab ²
Phosphorous, Total⁴				--- mg/L	--- mg/L	2 Samples/6-Months ³	Grab ²
Enterococci⁴				--- cfu/100 mL	--- cfu/100 mL	2 Samples/6-Months ³	Grab ²
Oil and Grease				--- mg/L	15 mg/L	2 Samples/6-Months ³	Grab ²
Copper, Total				--- mg/L	--- mg/L	2 Samples/6-Months ³	Grab ²
Lead, Total				--- mg/L	--- mg/L	2 Samples/6-Months ³	Grab ²
Aluminum, Total				--- mg/L	--- mg/L	2 Samples/6-Months ³	Grab ²
Zinc, Total				--- mg/L	--- mg/L	2 Samples/6-Months ³	Grab ²
PCB 1016				--- mg/L	--- mg/L	2 Samples/6-Months ^{3,5}	Grab ²
PCB 1221				--- mg/L	--- mg/L	2 Samples/6-Months ^{3,5}	Grab ²
PCB 1232				--- mg/L	--- mg/L	2 Samples/6-Months ^{3,5}	Grab ²
PCB 1242				--- mg/L	--- mg/L	2 Samples/6-Months ^{3,5}	Grab ²
PCB 1248				--- mg/L	--- mg/L	2 Samples/6-Months ^{3,5}	Grab ²
PCB 1254				--- mg/L	--- mg/L	2 Samples/6-Months ^{3,5}	Grab ²
PCB 1260				--- mg/L	--- mg/L	2 Samples/6-Months ^{3,5}	Grab ²

--- Signifies a parameter which must be monitored, and data must be reported; no limit has been established at this time.

¹Flow shall be calculated using the drainage area, runoff coefficient, and the amount of rainfall.

²The Grab or "First Flush" value shall be obtained using a grab sample, consisting of an individual sample of at least 100 mL, collected during the first thirty (30) minutes of a discharge. A grab sample can be taken during the first hour of discharge, and the discharger shall submit a description of why a sample during the first thirty (30) minutes was impracticable.

³Monitoring is required twice per each 6-month interval (January 1 through June 30 and July 1 through December 31). Each monitoring event must be conducted during a representative and measurable storm event that follows the preceding monitoring event by at least thirty (30) days. Samples must be obtained from a

discharge which is the result of a representative storm event that occurs at least forty-eight (48) hours after the previously measurable (greater than 0.1 inches in magnitude) storm event. A representative storm event should be within 50% of the average Rhode Island storm event (0.7 inches in depth and 12 hours in duration) for both depth and duration, but in no case less than 0.1 inches per twenty-four (24) hours.

⁴After two (2) consecutive monitoring periods (i.e., 12 consecutive months and at least four samples), if the pollutant is not detected in the discharge (i.e., non-detect using sufficiency sensitive detection limits), after notifying the Department **and** receiving written approval from the Department, the permittee may discontinue monitoring unless a TMDL or other water quality determination has specific instructions to the contrary, in which case the permittee must follow those instructions. Written notification must include a cover letter and an analytic sampling report.

⁵Monitoring is required twice per each 6-month interval (January 1 through June 30 and July 1 through December 31) that the shredder has been operated. The facility must provide DEM at least 30 days advanced written notice of the facility's intent to operate the shredder. Once shredding begins, monitoring shall continue until further written notice from DEM that monitoring is no longer required.

I.A.2

- a. The pH of the effluent shall not be less than 6.5 nor greater than 9.0 standard units at any time, unless these values are exceeded due to natural causes or as a result of the approved treatment processes.
- b. The discharge shall not cause visible discoloration of the receiving waters.
- c. The effluent shall contain neither a visible oil sheen, foam, nor floating solids at any time.

I.A.3 All existing manufacturing, commercial, mining, and silvicultural dischargers must notify the Director as soon as they know or have reason to believe:

- a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
 - (1) One hundred micrograms per liter (100 µg/L);
 - (2) Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitro-phenol; and one milligram per liter (1 mg/L) for antimony;
 - (3) Five (5) times the maximum concentration reported for that pollutant in the permit application in accordance with 40CFR122.21(g)(7); or
 - (4) Any other notification level established by the Director in accordance with 40CFR122.44(f) and Rhode Island Code of Regulations.
- b. That any activity has occurred or will occur which would result in the discharge, on a non-routine or infrequent basis, of any toxic pollutant not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
 - (1) Five hundred micrograms per liter (500 µg/L);
 - (2) One milligram per liter (1 mg/L) for antimony;
 - (3) Ten (10) times the maximum concentration reported for that pollutant in the permit application in accordance with 40CFR122.21(g)(7); or
 - (4) Any other notification level established by the Director in accordance with 40CFR122.44(f) and Rhode Island Code of Regulations.
- c. That they have begun or expect to begin to use or manufacture as an intermediate or final product or by-product any toxic pollutant, which was not reported in the permit application.

I.A.4 This permit authorizes the discharge of stormwater runoff and the following allowable non-stormwater discharges only:

- a. firefighting activities;
- b. fire hydrant flushings;
- c. external building washdowns that do not use detergents or hazardous cleaning products (such as those containing bleach, hydrofluoric acid, muriatic acid, sodium hydroxide, nonylphenols) and do employ appropriate control measures to minimize discharges of mobilized solids and other pollutants;

- d. lawn watering;
- e. uncontaminated ground water, springs;
- f. air conditioning condensate;
- g. potable waterline flushings;
- h. irrigation drainage;
- i. foundation or footing drains where flows are not contaminated with process materials, such as solvents, or contaminated by contact with soils, where spills or leaks of toxic or hazardous materials has occurred;
- j. Water sprayed for dust control or at truck load wet-down station;
- k. Uncontaminated utility vault dewatering; dechlorinated waterline testing water; hydrostatic test water that does not contain any treatment chemicals and is not contaminated with process chemicals;
- l. Pavement wash waters, provided that detergents or hazardous cleaning products are not used (e.g., bleach, hydrofluoric acid, muriatic acid, sodium hydroxide, nonylphenols), and the wash waters do not come into contact with oil and grease deposits, sources of pollutants associated with industrial activities, or any other toxic or hazardous materials, unless residues are first cleaned up using dry clean-up methods (e.g., applying absorbent materials and sweeping, using hydrophobic mops/rags), and for which appropriate control measures are in place to minimize discharges of mobilized solids and other pollutants (e.g., filtration, detention, settlement);
- m. Discharges from washing of vehicles provided: chemicals, soaps, detergents, hazardous cleaning products (such as those containing bleach, hydrofluoric acid, muriatic acid, sodium hydroxide, nonylphenols), steam, or heated water are not used; cleaning is restricted to the outside of the vehicle (e.g., no engines, transmissions, undercarriages, or truckbeds); or washing is not used to remove accumulated industrial materials, paint residues, heavy metals or any other potentially hazardous materials from surfaces; and

If any of these discharges may reasonably be expected to be present, they must be specifically identified and addressed in the facility's Stormwater Pollution Prevention Plan (SWPPP) required under Part I.B.

I.A.5 The discharge of contaminated groundwater is not authorized by this permit.

I.A.6 The permittee shall drain all fluids and remove all hazardous waste from vehicles prior to dismantling and/or further processing of the vehicles. All fluids and wastes shall be stored/disposed of in accordance with applicable State, Local, and Federal requirements.

I.A.7 PFAS Monitoring

Within **one hundred and twenty (120) days of the effective date of this permit**, the permittee is required to take one grab sample to be analyzed for the PFAS parameters listed in Appendix 2. PFAS shall be analyzed using Clean Water Act wastewater draft analytical method 1633 until a 40 CFR Part 136 approved test method for wastewater is approved. The permittee must report the analytical results to the DEM in hard copy.

I.A.8 This permit serves as the State's Water Quality Certificate for the discharges described herein. A copy of the active permit shall be retained on site at all times.

I.B. STORMWATER POLLUTION PREVENTION PLAN REQUIREMENTS

- I.B.1** The Stormwater Treatment System Operation and Maintenance Plan and a Stormwater Pollution Prevention Plan (SWPPP) shall be implemented and maintained by the permittee. **The SWPPP dated February 2022 shall be amended to address the requirements from Part I.B and submitted to the Rhode Island Department of Environmental Management (DEM) within ninety (90) days (XXX XX, 202X) of the effective date of this permit.** The SWPPP shall be prepared in accordance with good engineering practices and identify potential sources of pollutants, which may reasonably be expected to affect the quality of stormwater discharges associated with the facility. In addition, the SWPPP shall describe and ensure the implementation of Best Management Practices (BMPs) that are to be used to reduce or eliminate the amount of pollutants in stormwater discharges associated with the facility and to assure compliance with the terms and conditions of this permit. Some of the specific BMPs that must be evaluated in the SWPPP are the reduction of peak runoff flows and volumes, reduction of impervious surfaces, restoration of natural buffers and drainage systems (e.g., overland flow and grassy swales), infiltration of rooftop runoff, vacuum-assisted sweeping, and the use of permeable parking surfaces.
- I.B.2** The SWPPP shall be signed by the permittee in accordance with the RIPDES Regulations (RI Code of Regulations: 250-RICR-150-10-1.12) and retained on-site. Upon request, the SWPPP shall also be made available to the Department of Environmental Management at any time.
- I.B.3** If the SWPPP is reviewed by the Department of Environmental Management, the permittee may be notified at any time that the SWPPP does not meet one or more of the minimum requirements of this part. After such notification, the permittee shall make changes to the SWPPP and shall submit a written certification that the requested changes have been made. Unless otherwise provided by the Department of Environmental Management, the permittee shall have thirty (30) days after such notification to make the necessary changes.
- I.B.4** The permittee shall immediately amend the SWPPP whenever there is a change in design, construction, operation, or maintenance, which has a significant effect on the potential for the discharge of pollutants to the waters of the State; a release of reportable quantities of hazardous substances and oil; or if the SWPPP proves to be ineffective in achieving the general objectives of controlling pollutants in stormwater discharges (based upon exceedances of the effluent limitations in Part I.A, exceedances of benchmark concentrations in Part I.D, or the results of the inspections required in Part I.C of this permit). If the amendments will include changes to the structural controls, the revised SWPPP must include a schedule for the implementation of the proposed structural modifications. The permittee shall promptly, and in no case later than thirty (30) calendar days from the date that the SWPPP is amended, implement any changes to non-structural pollution prevention measures. Proposed changes to structural stormwater controls must be approved by the DEM prior to implementation. Upon DEM approval of the changes to the structural controls, the permittee shall implement the changes in accordance with the approved schedule. Changes must be noted and then submitted to the DEM within fourteen (14) days. Amendments to the Plan may be reviewed in the same manner as Part I.B.3 of this permit.
- I.B.5** The SWPPP shall include, at a minimum, the following items:
- a. Description of Potential Pollutant Sources. The SWPPP must provide a description of potential sources which may be reasonably expected to add significant amounts of pollutants to stormwater discharges, or which may result in the discharge of pollutants during dry weather from separate storm sewers draining the facility. It must identify all activities and significant materials, which may potentially be significant pollutant sources. The SWPPP shall include:
 - (1) A site map with a suitable scale (no smaller than 1"=100') that supports easy identification of the following items indicating:

- a. property boundaries and the overall size of the property in acres;
 - b. a delineation of the drainage area of each stormwater outfall including the directions of stormwater flow;
 - c. a delineation of all surface waterbodies in the vicinity of the facility, including wetlands, with an indication of any impairments or established TMDLs;
 - d. a delineation of all impervious surfaces, and the location of all significant structures;
 - e. location of each existing stormwater control measures and stormwater conveyances including ditches, pipes, and swales;
 - f. locations of stormwater inlets and outfalls, with a unique identification code for each outfall (e.g., Outfall 001), identify if the outfall will be used as a stormwater monitoring point, and an approximate outline of the area draining to each outfall;
 - g. locations where significant materials are exposed to stormwater, and locations of potential pollutant sources;
 - h. locations where significant leaks or spills have occurred;
 - i. all separate storm sewers;
 - j. location and description of non-stormwater discharges;
 - k. the locations of the following activities where such areas are exposed to stormwater: scrap and waste material storage, outdoor scrap and waste processing equipment, containment areas for turnings exposed to cutting fluids, fueling stations, vehicle and equipment maintenance and/or cleaning areas, loading/unloading areas, access roads and rail lines, material handling areas, material storage areas, process areas, liquid storage tanks, waste disposal areas, and machinery;
- (2) Location and source of runoff from adjacent property containing significant quantities of pollutants of concern to the facility and an evaluation of how the quality of the stormwater running onto the facility impacts the stormwater discharges may be included. Provide a topographic map extending one-quarter of a mile beyond the property boundaries of the facility;
- (3) An estimate of the overall runoff coefficient for the site, determined by an acceptable method, such as, but not limited to, area weighting;
- (4) Receiving Waters and Wetlands: The name of the nearest receiving water(s) with waterbody identification number (if one is assigned), including intermittent streams, the areal extent and description of wetland that may receive discharges from the facility, impairments and a list of pollutants causing impairments if applicable.
- (5) Summary of Potential Pollutant Sources: Identify each area of the facility that generates stormwater discharges with a description of the industrial activities and materials in each area, a prediction of the direction of flow, and an estimate of the types of pollutants which are likely to be present in stormwater. List significant spills and leaks, including releases of oil or hazardous substances in excess of quantities that are reportable under CWA §311 (see 40 CFR 110.10 and 40 CFR 117.21) or section 102 of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). Significant spills may also include releases of oil and hazardous materials that are not in excess of reporting

requirements.

Industrial materials or activities include, but are not limited to, material handling equipment or activities; industrial machinery; storage, cleaning, fueling and maintenance of vehicles and equipment storage; and raw materials, intermediate products, by-products, final products, or waste products. Material handling activities include the storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, final product, or waste product.

- a. A narrative description of significant materials that have been treated, stored, or disposed of in a manner to allow exposure to stormwater in the past five (5) years; method of on-site storage or disposal; materials management practices employed to minimize contact of these materials with stormwater runoff in the past five (5) years; materials loading and access areas; the location and description of existing structural and non-structural control measures to reduce pollutants in stormwater runoff; and description of any treatment the stormwater receives;
 - b. A list of significant spills and significant leaks of toxic or hazardous pollutants that occurred at the facility in the past five (5) years; The permittee must clearly identify areas where potential spills and leaks, which can contribute pollutants to the stormwater discharges, can occur, and their accompanying drainage points.
- (6) A list of any pollutants limited in effluent guidelines to which a facility is subject under 40 CFR Subchapter N, any pollutants listed on a RIPDES permit to discharge process water, and any information required under the RIPDES Regulations (RI Code of Regulations: 250-RICR-150-10-1.11.D).
 - (7) A summary of existing sampling data describing pollutants in stormwater discharges from the facility;
 - (8) A summary of the mitigating factors for pollutants with a TMDL.
- b. Stormwater Management Controls. The SWPPP must include a description of stormwater management controls appropriate for the facility and implement such controls. The appropriateness for implementing controls listed in the SWPPP must reflect identified potential sources of pollutants at the facility. The description of stormwater management controls must address the following minimum components, including a schedule for implementing such controls:
 - (1) *Pollution Prevention Team.* The SWPPP must identify a specific individual(s) within the facility organization as members of a team that are responsible for developing the SWPPP and assisting in its implementation, maintenance, and revision. The SWPPP must clearly identify the responsibilities of each team member. The activities and responsibilities of the team must address all aspects of facility's SWPPP.
 - (2) *Risk Identification and Assessment/Material Inventory.* The SWPPP must assess the potential of various sources that contribute pollutants to stormwater. The SWPPP must also include an inventory of the types of materials handled. Each of the following must be evaluated for the reasonable potential for contributing pollutants to runoff: loading and unloading operations, outdoor manufacturing or processing activities, significant dust or particulate generating processes, and on-site waste disposal practices. Factors to consider include the toxicity of chemicals; quantity of chemicals used, produced, or discharged; the likelihood of contact with stormwater, and the history of significant leaks or spills of toxic or hazardous pollutants.
 - (3) *Preventative Maintenance.* A preventative maintenance program must involve inspection

and maintenance of stormwater management devices (i.e., oil/water separators, catch basins) as well as inspecting and testing equipment and systems to uncover conditions that could cause breakdown or failures resulting in discharges of pollutants to surface waters. The SWPPP must include a preventative maintenance schedule for all components of the collection system. This schedule must include all of the minimum requirements from Part I.C of this permit.

- (4) *Minimizing Exposure.* Where practicable, industrial materials and activities should be protected by a storm-resistant shelter to prevent exposure to rain, snow, snowmelt, or runoff.
- (5) *Good Housekeeping.* Good housekeeping requires the maintenance of a clean, orderly facility. The SWPPP must include a schedule for parking lot sweeping that addresses both floatables control and TSS removal. This schedule must comply with the minimum requirements of Part I.C.
 - a. Keep all exposed areas free of solid waste, garbage, and floatable debris. Solid waste, garbage and floatable debris must be stored and disposed of in such way that prevents exposure;
 - b. Use all known, available and reasonable methods to prevent rodents, birds, and other animals from feeding/nesting/roosting at the facility;
 - c. Install structural source control BMPs to address on-site activities and sources that could cause bacterial/pathogen contamination (e.g., dumpsters, compost piles, food waste and animal products).
- (6) *Spill Prevention and Response Procedure.* Areas where potential spills can occur, and their accompanying drainage points, must be identified clearly in the SWPPP. The potential for spills to enter the stormwater drainage system must be eliminated wherever feasible. Where appropriate, specific material handling procedures, storage requirements, and procedures for cleaning up spills must be identified in the SWPPP and be made available to the appropriate personnel. The necessary equipment to implement a clean-up must also be made available to personnel. The permittee shall immediately notify the Department of Environmental Management of any chemical releases in excess of reportable quantities.
- (7) *Stormwater Management.* The SWPPP must contain a narrative consideration of the appropriateness of traditional stormwater management practices. Based on an assessment of the potential of various sources to contribute pollutants to stormwater discharges (see Part I.B.5.b(2) of this permit), the SWPPP must also provide those measures, determined to be reasonable and appropriate, must be implemented and maintained.
- (8) *Sediment Transport.* The SWPPP must identify the sanding/salting procedures and/or practices that will be used to minimize the discharge of pollutants from sanding/salting practices. Items to include are; sand/salt storage, application methods, application rates, and clean-up procedures.
- (9) *Sediment and Erosion Prevention.* The SWPPP must identify areas which; due to topography, activities, or other factors; have a high potential for significant soil erosion and identify measures to limit erosion.
- (10) *Employee Training.* Employee training programs must inform personnel responsible for implementing activities identified in the SWPPP, or otherwise responsible for stormwater management at all levels, of the components and goals of the SWPPP. Training should address topics such as spill response, good housekeeping, and material management

practices. The SWPPP must identify and record periodic dates for such training.

- (11) *Visual Inspections*. Qualified plant personnel must be identified to inspect designated equipment and site areas. Material handling areas must be inspected for evidence of, or the potential for, pollutants entering the drainage system. A tracking or follow up procedure must be used to ensure that the appropriate action has been taken in response to the inspection. Records of inspections must be maintained on site for at least five (5) years.
- (12) *Record keeping and Internal Reporting Procedures*. Incidents such as spills, or other discharges, along with other information describing the quality and quantity of stormwater discharges must be included in the records. All inspections and maintenance activities must be documented and maintained on site for at least five (5) years.
- (13) *Other Controls*. Offsite tracking of raw, final, or waste materials or sediments, and the generation of dust must be minimized. Tracking or blowing of raw, final, or waste materials from areas of no exposure to exposed areas must be minimized. Velocity dissipation devices must be placed at discharge locations and along the length of any outfall channel if they are necessary to provide a non-erosive flow velocity from the structure to a watercourse.

c. *Industry Specific Stormwater Control Measures*

- (1) *Inbound Recyclable and Waste Material Control Program*. Minimize the chance of accepting materials that could be significant sources of pollutants by conducting inspections of inbound recyclables and waste materials. Following are some control measure options: (a) provide information and education to suppliers of scrap and recyclable waste materials on draining and properly disposing of residual fluids (e.g., from vehicles and equipment engines, radiators and transmissions, oil filled transformers, and individual containers or drums) and removal of mercury switches from vehicles before delivery to the facility; (b) establish procedures to minimize the potential of any residual fluids from coming into contact with precipitation or runoff; (c) establish procedures for accepting scrap lead-acid batteries (d) provide training targeted for those personnel engaged in the inspection and acceptance of inbound recyclable materials; and (e) establish procedures to ensure that liquid wastes, including used oil, are stored in materially compatible and non-leaking containers and are disposed of or recycled in accordance with the Resource Conservation and Recovery Act (RCRA).
- (2) *Scrap and Waste Material Stockpiles and Storage (Outdoor)*. Minimize contact of stormwater runoff with stockpiled materials, processed materials, and nonrecyclable wastes by instituting one or more of the following control measure options: (a) permanent or semi-permanent covers; (b) sediment traps, vegetated swales and strips, catch basin filters, and sand filters to facilitate settling or filtering of pollutants; (c) dikes, berms, containment trenches, culverts, and surface grading to divert runoff from storage areas; (d) silt fencing; and (e) oil and water separators, sumps, and dry absorbents for areas where potential sources of residual fluids are stockpiled (e.g., automobile engine storage areas).
- (3) *Stockpiling of Turnings Exposed to Cutting Fluids (Outdoor Storage)*. Minimize contact of surface runoff with residual cutting fluids by: (a) storing all turnings exposed to cutting fluids under some form of permanent or semi-permanent cover, or (b) establishing dedicated containment areas for all turnings that have been exposed to cutting fluids. Any containment areas must be constructed of concrete, asphalt, or other equivalent types of impermeable material and include a barrier (e.g., berms, curbing, elevated pads) to prevent contact with stormwater run-on. Stormwater runoff from these areas can be discharged, provided that any runoff is first collected and treated by an oil and water separator or its equivalent. The permittee must regularly maintain the oil and water separator (or its equivalent) and properly dispose of or recycle collected residual fluids.

- (4) *Scrap and Waste Material Stockpiles and Storage (Covered or Indoor Storage)*. Minimize contact of residual liquids and particulate matter from materials stored indoors or under cover with surface runoff. Following are some control measure options: (a) good housekeeping measures, including the use of dry absorbents or wet vacuuming to contain, dispose of, or recycle residual liquids originating from recyclable containers, or mercury spill kits for spills from storage of mercury switches; (b) not allowing washwater from tipping floors or other processing areas to discharge to the storm sewer system; and (c) disconnecting or sealing off of all floor drains connected to the storm sewer system.
- (5) *Scrap and Recyclable Waste Processing Areas*. Minimize surface runoff from coming in contact with scrap processing equipment. Pay attention to operations that generate visible amounts of particulate residue (e.g., shredding) to minimize the contact of accumulated particulate matter and residual fluids with runoff (i.e., through good housekeeping, preventative maintenance, etc.). Following are some control measure options: (a) regularly inspect equipment for spills or leaks and malfunctioning, worn, or corroded parts or equipment; (b) establish a preventative maintenance program for processing equipment; (c) use dry-absorbents or other cleanup practices to collect and dispose of or recycle spilled or leaking fluids or use mercury spill kits for spills from storage of mercury switches; (d) on unattended hydraulic reservoirs over 150 gallons in capacity, install protection devices such as low-level alarms or equivalent devices, or secondary containment that can hold the entire volume of the reservoir; (e) containment or diversion structures such as dikes, berms, culverts, trenches, elevated concrete pads, and grading to minimize contact of stormwater runoff with outdoor processing equipment or stored materials; (f) oil and water separators or sumps; (g) permanent or semi-permanent covers in processing areas where there are residual fluids and grease; (h) retention or detention ponds or basins; sediment traps, and vegetated swales or strips (for pollutant settling and filtration); (i) catch basin filters or sand filters.
- (6) *Scrap Lead-Acid Battery Program*. Properly handle, store, and dispose of scrap lead-acid batteries. Following are some control measure options (a) segregate scrap lead-acid batteries from other scrap materials; (b) properly handle, store, and dispose of cracked or broken batteries; (c) collect and dispose of leaking lead-acid battery fluid; (d) minimize or eliminate (if possible) exposure of scrap lead-acid batteries to precipitation or runoff; and (e) provide employee training for the management of scrap batteries.
- (7) *Spill Prevention and Response Procedures*. (See also Part I.C.2) Install alarms and/or pump shutoff systems on outdoor equipment with hydraulic reservoirs exceeding 150 gallons in the event of a line break. Alternatively, a secondary containment system capable of holding the entire contents of the reservoir plus room for precipitation can be used. Use a mercury spill kit for any release of mercury from switches, anti-lock brake systems, and switch storage areas.
- (8) *Supplier Notification Program*. As appropriate, notify major suppliers which scrap materials will not be accepted at the facility or will be accepted only under certain conditions.
- (9) *Waste Material Storage (Indoor)*. Minimize or eliminate contact between residual liquids from waste materials stored indoors and from surface runoff. The plan may refer to applicable portions of other existing plans, such as Spill Prevention, Control, and Countermeasure (SPCC) plans required under 40 CFR Part 112. Following are some control measure options (a) procedures for material handling (including labeling and marking); (b) clean up spills and leaks with dry absorbent materials, a wet vacuum system; (c) appropriate containment structures (trenching, curbing, gutters, etc.); and (d) a drainage system, including appurtenances (e.g., pumps or ejectors, manually operated valves), to handle discharges from diked or bermed areas. Drainage should be discharged to an appropriate treatment facility or sanitary sewer system or otherwise disposed of properly.

These discharges may require coverage under a separate RIPDES wastewater permit or industrial user permit under the pretreatment program.

- (10) *Waste Material Storage (Outdoor)*. Minimize contact between stored residual liquids and precipitation or runoff. The plan may refer to applicable portions of other existing plans, such as SPCC plans required under 40 CFR Part 112. Discharges of precipitation from containment areas containing used oil must also be in accordance with applicable sections of 40 CFR Part 112. Following are some control measure options (a) appropriate containment structures (e.g., dikes, berms, curbing, pits) to store the volume of the largest tank, with sufficient extra capacity for precipitation; (b) drainage control and other diversionary structures; (c) corrosion protection and/or leak detection systems for storage tanks; and (d) dry-absorbent materials or a wet vacuum system to collect spills.
 - (11) *Trucks and Rail Car Waste Transfer Areas*. Minimize pollutants in discharges from truck and rail car loading and unloading areas. Include measures to clean up minor spills and leaks resulting from the transfer of liquid wastes. Following are two control measure options: (a) containment and diversionary structures to minimize contact with precipitation or runoff, and (b) dry clean-up methods, wet vacuuming, roof coverings, or runoff controls.
 - (12) *Inbound Recyclable Material Control*. Minimize the chance of accepting nonrecyclables (e.g., hazardous materials) that could be a significant source of pollutants by conducting inspections of inbound materials. Following are some control measure options: (a) providing information and education measures to inform suppliers of recyclables about acceptable and non-acceptable materials, (b) training drivers responsible for pickup of recycled material, (c) clearly marking public drop-off containers regarding which materials can be accepted, (d) rejecting nonrecyclable wastes or household hazardous wastes at the source, and (e) establishing procedures for handling and disposal of nonrecyclable material.
 - (13) *Outdoor Storage*. Minimize exposure of recyclables to precipitation and runoff. Used good housekeeping measures to prevent accumulation of particulate matter and fluids, particularly in high traffic areas. Following are some control measure options (a) provide totally enclosed drop-off containers for the public; (b) install a sump and pump with each container pit and treat or discharge collected fluids to a sanitary sewer system; (c) provide dikes and curbs for secondary containment; (d) divert surface water runoff away from outside material storage areas; (e) provide covers over containment bins, dumpsters, and roll-off boxes; and (f) store the equivalent of one day's volume of recyclable material indoors.
 - (14) *Indoor Storage and Material Processing*. Minimizing the release of pollutants from indoor storage and processing areas. Following are some control measure options (a) schedule routine good housekeeping measures for all storage and processing areas, (b) prohibit tipping floor washwater from draining to the storm sewer system, and (c) provide employee training on pollution prevention practices.
 - (15) *Vehicle and Equipment Maintenance*. Following are some control measure options for areas where vehicle and equipment maintenance occur outdoors (a) prohibit vehicle and equipment washwater from discharging to the storm sewer system, (b) minimize or eliminate outdoor maintenance areas whenever possible, (c) establish spill prevention and clean-up procedures in fueling areas, (d) avoid topping off fuel tanks, (e) divert runoff from fueling areas, (f) store lubricants and hydraulic fluids indoors, and (g) provide employee training on proper handling and storage of hydraulic fluids and lubricants.
- d. Post-Construction Stormwater Management in New Development and Redevelopment. The permittee shall develop and implement a conceptual redevelopment plan that contains

standards and criteria to address stormwater runoff from new development and redevelopment projects, as defined by the DEM Stormwater Management, Design, and Installation Rules (250-RICR-150-10-8). The plan must address direct discharges of stormwater to waters of the State in addition to the discharges to the storm drainage system. All new and redevelopment projects are required to meet the eleven minimum standards and comply with the specific performance criteria of the DEM Stormwater Management, Design, and Installation Rules (250-RICR-150-10-8). The post-construction program must include:

- (1) Development and implementation of preferred strategies, which are to be incorporated into new projects. These strategies shall include a combination of Low Impact Development (LID) and, structural methods such as infiltration practices, sand filters, bioretention practices, vegetated swales and/or vegetated filter strips.
- (2) Requirements that all controls to address post-construction runoff are consistent with the March 2015 State of Rhode Island Stormwater Design and Installation Manual (as amended).
- (3) Development of an Operation and Maintenance Plan to ensure the stormwater conveyance systems and management practices continue to function as designed.
- (4) Strategies to provide groundwater recharge, water quality treatment, and where appropriate, preserving, enhancing, or establishing buffers along surface waterbodies and tributaries.
- (5) Strategies to reduce runoff volume which may include minimizing impervious areas such as roads, parking, paving or other surfaces; encouraging infiltration of non-contaminated runoff; preventing channelization; encouraging sheet flow; and where appropriate, preserving, enhancing or establishing buffers along surface waterbodies and tributaries.

e. Non-Storm Water Discharges

- (1) The SWPPP must include a certification that all discharges (i.e. outfalls) have been tested or evaluated for the presence of non-storm water. The certification must be signed in accordance with Part II.(k) of this permit, and include:
 - a. the date of any testing and/or evaluation
 - b. identification of potential significant sources of non-storm water at the site;
 - c. a description of the results of any test and/or evaluation for the presence of non-storm water discharges;
 - d. a description of the evaluation criteria or testing method used;
 - e. a list of the outfalls or onsite drainage points that were observed during the test.

f. Allowable Non-Storm Water Discharges

- (1) Certain sources of non-storm water are allowable under this permit (see Part I.A.5). In order for these discharges to be allowed, the SWPPP must include:
 - a. identification of each allowable non-storm water source;
 - b. the location where it is likely to be discharged; and
 - c. descriptions of appropriate BMPs for each source.

- (2) Except for flows from firefighting activities, the permittee must identify in the SWPPP all sources of allowable non-storm water that are discharged under the authority of this permit.
- (3) If the permittee includes mist blown from cooling towers amongst the allowable non-storm water discharges, the permittee must specifically evaluate the potential for the discharges to be contaminated by chemicals used in the cooling tower and determine that the levels of such chemicals in the discharges would not cause or contribute to a violation of an applicable water quality standard after implementation of the BMPs the permittee has selected to control such discharges.

I.B.6 Site Inspection. An annual site inspection must be conducted by appropriate personnel named in the SWPPP to verify that the description of potential pollutant sources required under Part I.B.5.a is accurate, that the drainage map has been updated or otherwise modified to reflect current conditions, and controls to reduce pollutants in stormwater discharges identified in the SWPPP are being implemented and are adequate. The inspections must include an evaluation of existing stormwater BMPs. A tracking or follow up procedure must be used to ensure that the appropriate action has been taken in response to the inspections. Records documenting significant observations made during the site inspection must be retained as part of the SWPPP for a minimum of five (5) years from the date of inspection.

I.B.7 Consistency with Other Plans. Stormwater management controls may reflect requirements for Spill Prevention Control and Countermeasure (SPCC) plans under Section 311 of the CWA or Best Management Practices (BMP) Programs otherwise required by a RIPDES permit and may incorporate any part of such plans into the SWPPP by reference.

I.C. INSPECTIONS AND MAINTENANCE

I.C.1 Inspections of the BMPs are to be conducted in a manner consistent with the permittee's April 14, 2021 Stormwater Treatment System Operation and Maintenance Plan and SWPPP as amended and approved by DEM. This includes inspection and maintenance of the following major Stormwater Treatment System components: Swirl Concentrators, Oil Water Separators, Pump Station, Aeration Tank, Aeration Blower, Sediment Forebay, and Bioretention Swale. The SWPPP must also identify any applicable maintenance schedule and the procedures to collect, handle, and dispose of or recycle residual fluids. If site inspections required by Part I.B and Part I.C identify BMPs that are not operating effectively, maintenance must be performed before the next anticipated storm event, or as necessary to maintain the continued effectiveness of stormwater controls. If maintenance prior to the next anticipated storm event is impracticable, maintenance must be scheduled and accomplished within fourteen (14) calendar days. Results of all inspections must be documented, and records retained on-site for a period of five (5) years.

I.C.2 At a minimum, the following activities must be conducted at the specified frequency:

- a. Perform monthly inspections of any erodible surfaces for evidence of erosion and, if present, reseed and ensure that seed and mulch remain in place and are not washed from the soil surface until the area has been stabilized.
- b. Perform monthly inspection of outfalls for evidence of a failure in the stormwater controls to remove sediment, floatables, color, odor, foam, and/or oil from the discharge.
- c. Perform monthly inspections of any hazardous waste storage areas for evidence of leaks. All leaks must be repaired, and the spilled material cleaned out immediately.
- d. Perform monthly inspections of the facility for evidence of any spills of oil and/or gasoline. Any spills must be cleaned up immediately and notification shall be provided in accordance with the

SPCC Plan.

- e. Perform monthly inspections of the facility to ensure that the good housekeeping measures identified in the SWPPP are being followed.
- f. Inspect and monitor sediment accumulation in all catch basins and solids removal systems a minimum of monthly.
- g. Remove sediment accumulation from all catch basins and solids removal systems when the sediment volume reaches the manufacturer's recommended "clean out" level and/or if there is a failure in the solids removal system. At a minimum, sediment must be removed from all catch basins and solids removal systems quarterly.
- h. Perform monthly inspections of solid waste storage areas for evidence of leaks and/or spills. All leaks and spills must be repaired, and the spilled material cleaned out immediately.
- i. The permittee is required to sweep all streets, roads, and parking areas within its regulated area a minimum of monthly. If it is determined that monthly sweeping is not adequate to control the amount of sediment and/or floatables being discharged from the facility, the permittee shall increase the frequency of sweeping. Any changes to the sweeping program and all documentation and supporting rationale should be reported to the DEM as part of the annual comprehensive site evaluation report required under Part I.F of this permit. Any requests to decrease the sweeping frequency must be approved by DEM in writing.

I.C.3 Sediment removal and erosion control maintenance must be performed in a manner consistent with the SWPPP. Any sediment removal and/or maintenance performed must be documented and records retained on-site for a period of five (5) years.

I.C.4 Quarterly Visual Assessment Procedures: Twice within the January 1-June 30 monitoring period and twice within the July 1-December 31 monitoring period for the entire permit term, (except as noted in Part I.E.), a stormwater sample from each outfall must be collected and a visual assessment of each of these samples must be conducted. These samples are not required to be collected consistent with 40 CFR Part 136 procedures but should be collected in such a manner that the samples are representative of the stormwater discharge.

The visual assessment must be made:

- Of a sample in a clean, clear glass, or plastic container, and examined in a well-lit area;
- On samples collected within the first 30 minutes of an actual discharge from a storm event. If it is not possible to collect the sample within the first 30 minutes of discharge, the sample must be collected as soon as practicable after the first 30 minutes and the reason why it was not possible to take samples within the first 30 minutes must be documented. In the case of snowmelt, samples must be taken during a period with a measurable discharge from the site; and
- For storm events, on discharges that occur at least 48 hours (2 days) from the previous discharge. The 48-hour (2-day) storm interval does not apply if it is documented that less than a 48-hour (2-day) interval is representative for local storm events during the sampling period.

The sample must be visually inspected for the following water quality characteristics:

- Color;
- Odor;
- Clarity;
- Floating solids;
- Settled solids;
- Suspended solids;
- Foam;

- Oil sheen; and
- Other obvious indicators of stormwater pollution.

Whenever the visual assessment shows evidence of stormwater pollution, the permittee must amend the SWPPP as described in Part I.B.4 of this permit.

I.D. BENCHMARK MONITORING

I.D.1 The permittee shall compare all sampling results to the following benchmark monitoring concentrations. The following benchmark concentrations are only to be used to evaluate the overall effectiveness of the SWPPP and are not to be used as effluent limits:

Parameter	Benchmark Concentration (mg/L)
COD (Chemical Oxygen Demand)	120
TSS	100
Total Copper	0.0056 ²
Total Lead	0.023
Total Aluminum	0.75
Total Zinc	0.05
PCB 1016	0.000434 ¹
PCB 1221	0.10
PCB 1232	0.000387 ¹
PCB 1242	0.000289 ¹
PCB 1248	0.002544
PCB 1254	0.10
PCB 1260	0.000477

¹The minimum detection limit for this parameter is greater than the EPA benchmark value, therefore sampling results at which an exceedance determination will be based is the Minimum Detection Limit. These values may be reduced by permit modification as more sensitive test methods are approved by the EPA and the State.

² The benchmark value for copper is only applied to monitoring periods when the shredder is operating.

I.D.2 On a yearly basis, the permittee shall calculate the annual average of all sampling data for each pollutant for the previous calendar year (January 1 – December 31). When calculating the annual average concentrations, pollutant concentrations that were reported as less than the minimum detection limit from Part I.G shall be replaced with zeros. For parameters (copper, PCBs) where monitoring and/or benchmarks are only applicable when the shredder is operating, the annual average must be calculated using all available data gathered from the required sampling during the calendar year (i.e., the average may be determined using less than four samples). If the annual average exceeds the applicable benchmark concentration and the permittee determines that the exceedance of the benchmark is not attributable solely to the presence of that pollutant in natural background, then the permittee must complete Corrective Actions as detailed in Appendix 1. The first year of a benchmark exceedance will result in Level One Corrective Actions with subsequent years of benchmark exceedances resulting in Level Two Corrective Actions and then Level Three Corrective Actions. Corrective Actions must be summarized and submitted to DEM with the annual Comprehensive Site Evaluation Report required under Part I.F. with any amendments to the SWPPP. If the amendments will include changes to structural controls, the report must include a schedule for the implementation of the proposed structural modifications. Proposed changes to structural stormwater controls must be approved by the DEM prior to implementation. Upon DEM

approval of the structural changes, the permittee shall implement them in accordance with the approved schedule.

- I.D.3** The facility is required to submit written notification of the intent to operate the shredder at least 30 calendar days prior to equipment use. The Total Copper benchmark only applies during monitoring periods with shredder operation. Sampling frequencies and benchmarks apply to Total Copper, PCB 1016, PCB 1221, PCB 1232, PCB 1242, PCB 1248, PCB 1254, and PCB 1260 only during monitoring periods with shredder operation. Once shredding begins, monitoring shall continue until the facility receives written notice from DEM that monitoring is no longer required.

I.E. SAMPLING WAIVER

If the permittee is unable to collect samples, due to adverse climactic conditions, which create dangerous conditions for personnel or otherwise makes the collection of a sample impractical, the permittee may submit in lieu of sampling data a description of why samples could not be collected. The Permittee is prohibited from exercising this waiver more than once during a two (2) year period. A waiver is not required when there is no discharge, due to a lack of sufficient precipitation, during a given monitoring period.

I.F. ANNUAL COMPREHENSIVE SITE EVALUATION

In accordance with Part I.B.6, an annual comprehensive site evaluation report must be prepared which summarizes the results of the site inspections and Quarterly Visual Assessments required under the SWPPP and Part 1.C of this permit. This report must include the names of the personnel who conducted the inspections, any major or recurring observations noted in the inspections, and any maintenance performed on the erosion and sedimentation control measures. Results of all inspections and assessments must be documented, and records retained on-site for a period of five (5) years.

The Annual Comprehensive Site Evaluation Report shall also include a summary of any benchmark exceedances from the previous year along with the level of corrective actions that are required in accordance with Appendix 1 of this permit.

The annual comprehensive site evaluation report for a given calendar year must be submitted to the DEM at the following address by January 15th of the following year:

Environmental Engineer IV
RIPDES Program
Rhode Island Department of Environmental Management
235 Promenade Street
Providence, Rhode Island 02908

I.G. DETECTION LIMITS

The permittee shall assure that all testing required by this permit is performed in conformance with the method detection limits listed below (the EPA method is noted for reference, other EPA approved methods found in 40 CFR Part 136 may be utilized). In accordance with 40 CFR Part 136, EPA approved analysis techniques, quality assurance procedures and quality control procedures shall be followed for all reports required to be submitted under the RIPDES program. These procedures are described in "Methods for the Determination of Metals in Environmental Samples" (EPA/600/4-91/010) and "Methods for Chemical Analysis of Water and Wastes" (EPA/600/4-79/020).

The report entitled "Methods for the Determination of Metals in Environmental Samples" includes a test which must be performed in order to determine if matrix interferences are present, and a series of tests to enable reporting of sample results when interferences are identified. Each step of the series of tests becomes increasingly complex, concluding with the complete Method of Standard Additions analysis. The analysis need not continue once a result, which meets the applicable quality control requirements, has been obtained. Documentation of all steps conducted to identify and account for matrix interferences shall be submitted along with the monitoring reports.

If, after conducting the complete Method of Standard Additions analysis, the laboratory is unable to determine a valid result, the laboratory shall report "could not be analyzed". Documentation supporting this claim shall be submitted along with the monitoring report. If valid analytical results are repeatedly unobtainable, DEM may require that the permittee determine a method detection limit (MDL) for their effluent or sludge as outlined in 40 CFR Part 136, Appendix B.

Therefore, all sample results shall be reported as: an actual value, "could not be analyzed", less than the reagent water MDL, or less than an effluent or sludge specific MDL. The effluent or sludge specific MDL must be calculated using the methods outlined in 40 CFR Part 136, Appendix B. Samples, which have been diluted to ensure that the sample concentration will be within the linear dynamic range, shall not be diluted to the extent that the analyte is not detected. If this should occur the analysis shall be repeated using a lower degree of dilution.

When calculating sample averages for reporting on discharge monitoring reports (DMRs):

1. "Could not be analyzed" data shall be excluded, and shall not be considered as failure to comply with the permit sampling requirements;
2. Results reported as less than the MDL shall be included as zeros.

LIST OF TOXIC POLLUTANTS

The following list of toxic pollutants has been designated pursuant to Section 307(a)(1) of the Clean Water Act. The Method Detection Limits (MDLs) represent the required Rhode Island MDLs.

Volatiles - EPA Method 624		MDL µg/L (ppb)		22P	PCB-1248	0.283
1V	acrolein	10.0		23P	PCB-1260	0.222
2V	acrylonitrile	5.0		24P	PCB-1016	0.494
3V	benzene	1.0		25P	toxaphene	1.670
5V	bromoform	1.0		Base/Neutral - EPA Method 625 MDL µg/L (ppb)		
6V	carbon tetrachloride	1.0		1B	acenaphthene *	1.0
7V	chlorobenzene	1.0		2B	acenaphthylene *	1.0
8V	chlorodibromomethane	1.0		3B	anthracene *	1.0
9V	chloroethane	1.0		4B	benzidine	4.0
10V	2-chloroethylvinyl ether	5.0		5B	benzo(a)anthracene *	2.0
11V	chloroform	1.0		6B	benzo(a)pyrene *	2.0
12V	dichlorobromomethane	1.0		7B	3,4-benzofluoranthene *	1.0
14V	1,1-dichloroethane	1.0		8B	benzo(ghi)perylene *	2.0
15V	1,2-dichloroethane	1.0		9B	benzo(k)fluoranthene *	2.0
16V	1,1-dichloroethylene	1.0		10B	bis(2-chloroethoxy)methane	2.0
17V	1,2-dichloropropane	1.0		11B	bis(2-chloroethyl)ether	1.0
18V	1,3-dichloropropylene	1.0		12B	bis(2-chloroisopropyl)ether	1.0
19V	ethylbenzene	1.0		13B	bis(2-ethylhexyl)phthalate	1.0
20V	methyl bromide	1.0		14B	4-bromophenyl phenyl ether	1.0
21V	methyl chloride	1.0		15B	butylbenzyl phthalate	1.0
22V	methylene chloride	1.0		16B	2-chloronaphthalene	1.0
23V	1,1,2,2-tetrachloroethane	1.0		17B	4-chlorophenyl phenyl ether	1.0
24V	tetrachloroethylene	1.0		18B	chrysene *	1.0
25V	toluene	1.0		19B	dibenzo (a,h)anthracene *	2.0
26V	1,2-trans-dichloroethylene	1.0		20B	1,2-dichlorobenzene	1.0
27V	1,1,1-trichloroethane	1.0		21B	1,3-dichlorobenzene	1.0
28V	1,1,2-trichloroethane	1.0		22B	1,4-dichlorobenzene	1.0
29V	trichloroethylene	1.0		23B	3,3 '-dichlorobenzidine	2.0
31V	vinyl chloride	1.0		24B	diethyl phthalate	1.0
Acid Compounds - EPA Method 625		MDL µg/L (ppb)		25B	dimethyl phthalate	1.0
1A	2-chlorophenol	1.0		26B	di-n-butyl phthalate	1.0
2A	2,4-dichlorophenol	1.0		27B	2,4-dinitrotoluene	2.0
3A	2,4-dimethylphenol	1.0		28B	2,6-dinitrotoluene	2.0
4A	4,6-dinitro-o-cresol	1.0		29B	di-n-octyl phthalate	1.0
5A	2,4-dinitrophenol	2.0		30B	1,2-diphenylhydrazine (as azobenzene)	1.0
6A	2-nitrophenol	1.0		31B	fluoranthene *	1.0
7A	4-nitrophenol	1.0		32B	fluorene *	1.0
8A	p-chloro-m-cresol	2.0		33B	hexachlorobenzene	1.0
9A	pentachlorophenol	1.0		34B	hexachlorobutadiene	1.0
10A	phenol	1.0		35B	hexachlorocyclopentadiene	2.0
11A	2,4,6-trichlorophenol	1.0		36B	hexachloroethane	1.0
Pesticides - EPA Method 608		MDL µg/L (ppb)		37B	indeno(1,2,3-cd)pyrene *	2.0
1P	aldrin	0.059		38B	isophorone	1.0
2P	alpha-BHC	0.058		39B	naphthalene *	1.0
3P	beta-BHC	0.043		40B	nitrobenzene	1.0
4P	gamma-BHC	0.048		41B	N-nitrosodimethylamine	1.0
5P	delta-BHC	0.034		42B	N-nitrosodi-n-propylamine	1.0
6P	chlordane	0.211		43B	N-nitrosodiphenylamine	1.0
7P	4,4 '-DDT	0.251		44B	phenanthrene *	1.0
8P	4,4 '-DDE	0.049		45B	pyrene *	1.0
9P	4,4 '-DDD	0.139		46B	1,2,4-trichlorobenzene	1.0
10P	dieldrin	0.082		* Polynuclear Aromatic Hydrocarbons		
11P	alpha-endosulfan	0.031				
12P	beta-endosulfan	0.036				
13P	endosulfan sulfate	0.109				
14P	endrin	0.050				
15P	endrin aldehyde	0.062				
16P	heptachlor	0.029				
17P	heptachlor epoxide	0.040				
Pesticides - EPA Method 608		MDL µg/L (ppb)				
18P	PCB-1242	0.289				
19P	PCB-1254	0.298				
20P	PCB-1221	0.723				
21P	PCB-1232	0.387				

OTHER TOXIC POLLUTANTS
MDL µg/L (ppb)

Antimony, Total	3.0
Arsenic, Total	1.0
Beryllium, Total	0.2
Cadmium, Total	0.1
Chromium, Total	1.0
Chromium, Hexavalent	20.0
Copper, Total	1.0
Iron	50
Lead, Total	1.0
Mercury, Total	0.2
Nickel, Total	1.0
Selenium, Total	2.0
Silver, Total	0.5
Thallium, Total	1.0
Zinc, Total	5.0
Asbestos	**
Cyanide, Free Available	10.0
Phenols, Total	50.0
TCDD	**
MTBE (Methyl Tert Butyl Ether)	1.0
Phosphorus	2 mg/L

** No Rhode Island Department of Environmental Management (DEM) MDL

NOTE:

The MDL for a given analyte may vary with the type of sample. MDLs, which are determined in reagent water, may be lower than those determined in wastewater due to fewer matrix interferences. Wastewater is variable in composition and may therefore contain substances (interferents) that could affect MDLs for some analytes of interest. Variability in instrument performance can also lead to inconsistencies in determinations of MDLs.

To help verify the absence of matrix or chemical interference the analyst is required to complete specific quality control procedures. For the metals analyses listed above the analyst must withdraw from the sample two equal aliquots; to one aliquot add a known amount of analyte and then dilute both to the same volume and analyze. The unspiked aliquot multiplied by the dilution factor should be compared to the original. Agreement of the results within 10% indicates the absence of interference. Comparison of the actual signal from the spiked aliquot to the expected response from the analyte in an aqueous standard should help confirm the finding from the dilution analysis. (Methods for Chemical Analysis of Water and Wastes EPA-600/4-79/020).

For Methods 624 and 625 the laboratory must on an ongoing basis, spike at least 5% of the samples from each sample site being monitored. For laboratories analyzing 1 to 20 samples per month, at least one spiked sample per month is required. The spike should be at the discharge permit limit or 1 to 5 times higher than the background concentration determined in Section 8.3.2, whichever concentration would be larger. (40 CFR Part 136 Appendix B Method 624 and 625 subparts 8.3.1 and 8.3.11).

I.H. MONITORING AND REPORTING

The monitoring program in the permit specifies sampling and analysis, which will provide continuous information on compliance and the reliability and effectiveness of the installed pollution abatement equipment. The approved analytical procedures found in 40 CFR Part 136 are required unless other procedures are explicitly required in the permit. The Permittee is obligated to monitor and report sampling

results to the DEM within the time specified within the permit.

Unless otherwise specified in this permit, the permittee shall submit reports, requests, and information and provide notices in the manner described in this section.

I.H.1 Submittal of DMRs Using NetDMR

The permittee shall submit its time period monitoring data in discharge monitoring reports (DMRs) to DEM electronically using NetDMR per the following schedule:

Time Period Testing to be Performed	Report Due No Later Than	Results Submitted on DMR for
January 1 – June 30	July 15	January 1 – June 30
July 1 – December 31	January 15	July 1 – December 31

When the permittee submits DMRs using NetDMR, the permittee is not required to submit hard copies of DMRs to DEM.

I.H.2 Submittal of Reports as NetDMR Attachments

Unless otherwise specified in this permit, the permittee must submit electronic copies of documents in NetDMR that are directly related to the DMR. These include the following:

- a. DMR Cover Letters
- b. Below Detection Limit summary tables
- c. Benchmark Comparison

I.H.3 Submittal of Reports in Hard Copy Form

The following notifications and reports shall be submitted as hard copy with a cover letter describing the submission. These reports shall be signed and dated originals submitted to DEM.

- a. Transfer of Permit Notice
- b. Annual Comprehensive Site Inspection Report (January 15 each year)
- c. Written notifications required under Part II (as needed)
- d. Notice of unauthorized discharges (as needed)
- e. Updated SWPPP (90 days after the effective date of this permit and as needed according to Part 1.C.1, Part I.B.4, and Appendix 1)
- f. PFAS monitoring study analytical results (120 days after the effective date of this permit)
- g. Request to discontinue monitoring (as needed)
- h. Notification of shredder operation (as needed)

This information shall be submitted to DEM at the following address:

Rhode Island Department of Environmental Management
RIPDES Program
235 Promenade Street
Providence, Rhode Island 02908

I.H.4 Verbal Reports and Verbal Notifications

Any verbal reports or verbal notifications, if required in Parts I and/or II of this permit, shall be made to the DEM. This includes verbal reports and notifications which require reporting within 24 hours. (See Part II.(I)(5) General Requirements for 24-hour reporting) Verbal reports and verbal notifications shall be made to DEM at (401) 222-4700 or (401) 222-3070 at night.

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GENERAL REQUIREMENTS**(a) Duty to Comply**

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of Chapter 46-12 of the Rhode Island General Laws and the Clean Water Act (CWA) and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

- (1) The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the CWA for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.
- (2) The CWA provides that any person who violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the CWA is subject to a civil penalty not to exceed \$10,000 per day of such violation. Any person who willfully or negligently violates permit conditions implementing Sections 301, 302, 306, 307 or 308 of the Act is subject to a fine of not less than \$2,500 nor more than \$25,000 per day of violation, or by imprisonment of not more than 1 year, or both.
- (3) Chapter 46-12-13 of the Rhode Island General Laws provides that any person who violates a permit condition is subject to a civil penalty of not more than \$25,000 per day of such violation. Chapter 46-12-14(a) of the Rhode Island General Laws provides that any person who willfully or with criminal negligence violates a permit condition is subject to a criminal penalty of not more than \$25,000 per day of such violation or imprisonment for not more than five (5) years, or both. Chapter 46-12-14(b) of the Rhode Island General Laws provides that any person who knowingly makes any false statement in connection with the permit is subject to a criminal penalty of not more than \$5,000 for each instance of violation or by imprisonment for not more than 30 days, or both.

(b) Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. The permittee shall submit a new application at least 180 days before the expiration date of the existing permit, unless permission for a later date has been granted by the Director. (The Director shall not grant permission for applications to be submitted later than the expiration date of the existing permit.)

(c) Need to Halt or Reduce Not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

(d) Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

(e) Proper Operation and Maintenance

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures, and, where applicable, compliance with DEM "Rules and Regulations Pertaining to the Operation and Maintenance of Wastewater Treatment Facilities" and "Rules and Regulations Pertaining to the Disposal and Utilization of Wastewater Treatment Facility Sludge." This provision requires the operation of back-up or auxiliary facilities or similar systems only when the operation is necessary to achieve compliance with the conditions of the permit.

(f) Permit Actions

This permit may be modified, revoked and reissued, or terminated for cause, including but not limited to: (1) Violation of any terms or conditions of this permit; (2) Obtaining this permit by misrepresentation or failure to disclose all relevant facts; or (3) A change in any conditions that requires either a temporary or permanent reduction or elimination of the authorized discharge. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

(g) Property Rights

This permit does not convey any property rights of any sort, or any exclusive privilege.

(h) Duty to Provide Information

The permittee shall furnish to the Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Director, upon request, copies of records required to be kept by this permit.

(i) Inspection and Entry

The permittee shall allow the Director, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:

- (1) Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
- (2) Have access to and copy, at reasonable times any records that must be kept under the conditions of this permit;
- (3) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices or operations regulated or required under this permit; and
- (4) Sample or monitor any substances or parameters at any location, at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the CWA or Rhode Island law.

(j) Monitoring and Records

- (1) Samples and measurements taken for the purpose of monitoring shall be representative of the volume and nature of the discharge over the sampling and reporting period.
- (2) The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings from continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 5 years from the date of the sample, measurement, report, or application. This period may be extended by request of the Director at any time.
- (3) Records of monitoring information shall include:
 - (i) The date, exact place, and time of sampling or measurements;
 - (ii) The individual(s) who performed the sampling or measurements;
 - (iii) The date(s) analyses were performed;
 - (iv) The individual(s) who performed the analyses;
 - (v) The analytical techniques or methods used; and
 - (vi) The results of such analyses.
- (4) Monitoring must be conducted according to test procedures approved under 40 CFR Part 136 and applicable Rhode Island regulations, unless other test procedures have been specified in

this permit.

- (5) The CWA provides that any person who falsifies, tampers with, or knowingly renders inaccurate, any monitoring device or method required to be maintained under this permit shall upon conviction, be punished by a fine of not more than \$10,000 per violation or by imprisonment for not more than 6 months per violation or by both. Chapter 46-12-14(b) of the Rhode Island General Laws also provides that such acts are subject to a fine of not more than \$5,000 per violation, or by imprisonment for not more than 30 days per violation, or by both.
- (6) Monitoring results must be reported on a Discharge Monitoring Report (DMR).
- (7) If the permittee monitors any pollutant more frequently than required by the permit, using test procedures approved under 40 CFR Part 136, applicable State regulations, or as specified in the permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR.

(k) Signatory Requirement

All applications, reports, or information submitted to the Director shall be signed and certified in accordance with 250-RICR-150-10-1.12 of the Rhode Island Pollutant Discharge Elimination System (RIPDES) Regulations. Rhode Island General Laws, Chapter 46-12-14(b) provides that any person who knowingly makes any false statement, representation, or certification in any application, record, report (including monitoring reports or reports of compliance or noncompliance), plan, or other document filed or required to be maintained under this permit, shall, upon conviction, be punished by a fine of not more than \$5,000 for each instance of violation, or by imprisonment for not more than 30 days per violation, or by both.

(l) Reporting Requirements

- (1) Planned changes. The permittee shall give notice to the Director as soon as possible of any planned physical alterations or additions to the permitted facility.
- (2) Anticipated noncompliance. The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with the permit requirements.
- (3) Transfers. This permit is not transferable to any person except after written notice to the Director. The Director may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under State and Federal law.
- (4) Monitoring reports. Monitoring results shall be reported at the intervals specified elsewhere in this permit.
- (5) Twenty-four hour reporting. The permittee shall immediately report any noncompliance which may endanger health or the environment by calling DEM at (401) 222-4700 or (401) 222-3070 at night.

A written submission shall also be provided within five (5) days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

The following information must be reported immediately:

- (i) Any unanticipated bypass which causes a violation of any effluent limitation in the permit; or
- (ii) Any upset which causes a violation of any effluent limitation in the permit; or
- (iii) Any violation of a maximum daily discharge limitation for any of the pollutants specifically listed by the Director in the permit.

The Director may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.

- (6) Other noncompliance. The permittee shall report all instances of noncompliance not reported under paragraphs (1), (2), and (5), of this section, at the time monitoring reports are submitted. The reports shall contain the information required in paragraph (1)(5) of the section.
- (7) Other information. Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Director, they shall promptly submit such facts or information.

(m) Bypass

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

- (1) Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs (2) and (3) of this section.
- (2) Notice.
 - (i) Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten (10) days before the date of the bypass.
 - (ii) Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in 250-RICR-150-10-1.14(R) of the RIPDES Regulations.
- (3) Prohibition of bypass.
 - (i) Bypass is prohibited, and the Director may take enforcement action against a permittee for bypass, unless:
 - (A) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage, where "severe property damage" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production;
 - (B) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
 - (C) The permittee submitted notices as required under paragraph (2) of this section.
 - (ii) The Director may approve an anticipated bypass, after considering its adverse effects, if the Director determines that it will meet the three conditions listed above in paragraph (3)(i) of this section.

(n) Upset

"Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the

permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

- (1) Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of paragraph (2) of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.
- (2) Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - (i) An upset occurred and that the permittee can identify the cause(s) of the upset;
 - (ii) The permitted facility was at the time being properly operated;
 - (iii) The permittee submitted notice of the upset as required in 250-RICR-150-10-1.14(R) of the RIPDES Regulations; and
 - (iv) The permittee complied with any remedial measures required under 250-RICR-150-10-1.14(E) of the RIPDES Regulations.
- (3) Burden of proof. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

(o) Change in Discharge

All discharges authorized herein shall be consistent with the terms and conditions of this permit. Discharges which cause a violation of water quality standards are prohibited. The discharge of any pollutant identified in this permit more frequently than or at a level in excess of that authorized shall constitute a violation of the permit. Any anticipated facility expansions, production increases, or process modifications which will result in new, different or increased discharges of pollutants must be reported by submission of a new NPDES application at least 180 days prior to commencement of such discharges, or if such changes will not violate the effluent limitations specified in this permit, by notice, in writing, to the Director of such changes. Following such notice, the permit may be modified to specify and limit any pollutants not previously limited.

Until such modification is effective, any new or increased discharge in excess of permit limits or not specifically authorized by the permit constitutes a violation.

(p) Removed Substances

Solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters shall be disposed of in a manner consistent with applicable Federal and State laws and regulations including, but not limited to the CWA and the Federal Resource Conservation and Recovery Act, 42 U.S.C. §§6901 et seq., Rhode Island General Laws, Chapters 46-12, 23-19.1 and regulations promulgated thereunder.

(q) Power Failures

In order to maintain compliance with the effluent limitation and prohibitions of this permit, the permittee shall either:

In accordance with the Schedule of Compliance contained in Part I, provide an alternative power source sufficient to operate the wastewater control facilities;

or if such alternative power source is not in existence, and no date for its implementation appears in Part I,

Halt reduce or otherwise control production and/or all discharges upon the reduction,

loss, or failure of the primary source of power to the wastewater control facilities.

(r) Availability of Reports

Except for data determined to be confidential under paragraph (w) below, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the DEM, 235 Promenade Street, Providence, Rhode Island 02908. As required by the CWA, effluent data shall not be considered confidential. Knowingly making any false statement on any such report may result in the imposition of criminal penalties as provided for in Section 309 of the CWA and under Section 46-12-14 of the Rhode Island General Laws.

(s) State Laws

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State law.

(t) Other Laws

The issuance of a permit does not authorize any injury to persons or property or invasion of other private rights, nor does it relieve the permittee of its obligation to comply with any other applicable Federal, State, and local laws and regulations.

(u) Severability

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

(v) Reopener Clause

The Director reserves the right to make appropriate revisions to this permit in order to incorporate any appropriate effluent limitations, schedules of compliance, or other provisions which may be authorized under the CWA or State law. In accordance with 250-RICR-150-10-1.16 and 250-RICR-150-10-1.24 of the RIPDES Regulations, if any effluent standard or prohibition, or water quality standard is promulgated under the CWA or under State law which is more stringent than any limitation on the pollutant in the permit, or controls a pollutant not limited in the permit, then the Director may promptly reopen the permit and modify or revoke and reissue the permit to conform to the applicable standard.

(w) Confidentiality of Information

- (1) Any information submitted to DEM pursuant to these regulations may be claimed as confidential by the submitter. Any such claim must be asserted at the time of submission in the manner prescribed on the application form or instructions or, in the case of other submissions, by stamping the words "confidential business information" on each page containing such information. If no claim is made at the time of submission, DEM may make the information available to the public without further notice.
- (2) Claims of confidentiality for the following information will be denied:
 - (i) The name and address of any permit applicant or permittee;
 - (ii) Permit applications, permits and any attachments thereto; and
 - (iii) NPDES effluent data.

(x) Best Management Practices

The permittee shall adopt Best Management Practices (BMP) to control or abate the discharge of toxic pollutants and hazardous substances associated with or ancillary to the industrial manufacturing or treatment process and the Director may request the submission of a BMP plan where the Director determines that a permittee's practices may contribute significant amounts of such pollutants to waters of

the State.

(y) Right of Appeal

Within thirty (30) days of receipt of notice of a final permit decision, the permittee or any interested person may submit a request to the Director for an adjudicatory hearing to reconsider or contest that decision. The request for a hearing must conform to the requirements of 250-RICR-150-10-1.50 of the RIPDES Regulations.

DEFINITIONS

- For purposes of this permit, those definitions contained in the RIPDES Regulations, and the Rhode Island Pretreatment Regulations shall apply.
- The following abbreviations, when used, are defined below.

cu. M/day or M ³ /day	cubic meters per day
mg/l	milligrams per liter
µg/l	micrograms per liter
lbs/day	pounds per day
kg/day	kilograms per day
Temp. °C	temperature in degrees Centigrade
Temp. °F	temperature in degrees Fahrenheit
Turb.	turbidity measured by the Nephelometric Method (NTU)
TNFR or TSS	total nonfilterable residue or total suspended solids
DO	dissolved oxygen
BOD	five-day biochemical oxygen demand unless otherwise specified
TKN	total Kjeldahl nitrogen as nitrogen
Total N	total nitrogen
NH ₃ -N	ammonia nitrogen as nitrogen
Total P	total phosphorus
COD	chemical oxygen demand
TOC	total organic carbon
Surfactant	surface-active agent
pH	a measure of the hydrogen ion concentration
PCB	polychlorinated biphenyl
CFS	cubic feet per second
MGD	million gallons per day
Oil & Grease	Freon extractable material
Total Coliform	total coliform bacteria
Fecal Coliform	total fecal coliform bacteria
ml/l	milliliter(s) per liter
NO ₃ -N	nitrate nitrogen as nitrogen
NO ₂ -N	nitrite nitrogen as nitrogen
NO ₃ -NO ₂	combined nitrate and nitrite nitrogen as nitrogen
C1 ₂	total residual chlorine

APPENDIX 1**1. Corrective Actions Based on Exceedance of Benchmark(s)**

- a. **Level One Corrective Actions - Operational Source Control BMPs.** Following the completion of the first full calendar year of monitoring (January through December) with the average of the required benchmark monitoring results exceeding an applicable benchmark value, and the permittee determines that exceedance of the benchmark is not attributable solely to the presence of that pollutant in the natural background, the permittee must complete Level One Corrective Actions.
 - (1) For each parameter exceeded, the facility must complete the following corrective actions within fourteen (14) calendar days of receipt of the monitoring results. If it is infeasible to complete the corrective action within 14 calendar days, the permittee must document why it is infeasible to complete the corrective action within the 14-day timeframe. The permittee must also identify the schedule for completing the work, which must be done as soon as practicable after the 14-day timeframe but no longer than 45 calendar days after discovery:
 - a) Review the SWPPP and ensure that it fully complies with Part I.B of this permit.
 - b) Conduct an inspection to investigate the cause of the exceedance and to evaluate industrial pollutant sources at the facility that are or may be related to the benchmark exceedance(s).
 - c) Make appropriate revisions to the SWPPP and implement additional Operational Source Control BMPs with the goal of achieving the applicable benchmark value(s) in future discharges.
 - (2) Summarize the Level One Corrective Actions in the Annual Comprehensive Site Evaluation Report. Include a detailed description of the SWPPP revisions, any alterations or modifications to the existing BMPs, and any additional BMPs for each benchmark exceedance.
 - (3) Examples of Operational Source Control BMPs include, but are not limited to, increasing sweeping, conducting employee training, increasing inspection frequency, modifying the storage location of the pollutant source away from drainage path to the storm water drain network, limiting the amount of time potential pollutant sources are stored to prevent degradation and leachate, etc.
- b. **Level Two Corrective Actions – Structural Source Control BMPs.** Following the completion of the second year of monitoring with the average of the required 4 benchmark(s) monitoring results exceeding an applicable benchmark, the permittee must complete Level 2 Corrective Actions for each parameter exceeded in accordance with the following:
 - (1) Review the SWPPP and ensure that it fully complies with Part I.B of this permit.
 - (2) Make appropriate revisions to the SWPPP to include additional Structural Source Control BMPs with the goal of achieving the applicable benchmark value(s) in future discharges.
 - (3) Fully implement the SWPPP and Structural Source Control BMPs as soon as possible but no later than six months following the second benchmark monitoring year.
 - a) If installation of Structural Source Control BMPs within six months is not feasible, the permittee may request an extension for the construction of the Structural Source Control BMPs.
 - b) If the permittee determines that installation of Structural Source Control BMPs is not

necessary to prevent future benchmark exceedance(s), the permittee may request a waiver from this requirement by submitting to the Director a detailed explanation and technical basis for the request, no later than 45 days following the end of the second monitoring year that exceeds benchmarks. The waiver is subject to DEM's approval. For benchmark monitoring conducted prior to the full implementation and construction of Structural Source Control BMPs associated with Level 2 corrective actions, benchmark exceedances (for the same parameter) do not count towards additional Level 2 Corrective Actions.

- c) Summarize the Level 2 Corrective Actions in the Annual Comprehensive Site Evaluation Report. Include a detailed description of the SWPPP revisions, any alterations or modifications to the existing BMPs, and any additional BMPs for each benchmark exceedance.
- (4) Examples of Structural Source Control BMPs include, but are not limited to, modifying processes, storage, or handling of the pollutant, using recirculating wash systems, using roofs, canopies, and shed to cover piles, paving spill areas to facilitate cleaning, elevating storage areas, diverting runoff, building secondary containment, etc.
- c. **Level Three Corrective Actions – Treatment BMPs.** If the average of the 4 benchmark(s) monitoring results, conducted after level 2 corrective actions have been fully implemented and completed, exceeds an applicable benchmark, the permittee must complete Level Three Corrective Actions for each parameter exceeded in accordance with the following:
- (1) Review the SWPPP and ensure that it fully complies with Part B of this permit.
 - (2) Make appropriate revisions to the SWPPP to include modifications/alterations to the existing treatment BMPs and/or installation of additional Treatment BMPs with the goal of achieving the applicable benchmark value(s) in future discharges. Fully implement the SWPPP and modifications/enhancements of existing BMPs and/or construction of additional Treatment BMPs as necessary, as soon as possible but no later than six months following the Level 3 benchmark monitoring year, unless:
 - a) Installation of Treatment BMPs within six months is not feasible, in which case the permittee may request an extension for the construction of the Treatment BMPs.
 - b) The permittee determines that modifications and/or alterations of existing Treatment BMPs or installation of Treatment BMPs are not feasible or necessary to prevent future benchmark exceedance(s), in which case the permittee may request a waiver from this requirement by submitting to the Director a detailed explanation and technical basis for the request, no later than 30 days following the end of the Level 3 benchmark monitoring year.
 - c) The waiver is subject to DEM's approval. If the waiver is approved, the permittee will not be required to submit a Level Three Corrective Action Report under Part E.3.b.
 - (3) Summarize the Level Three Corrective Actions in the Annual Comprehensive Site Evaluation Report. Include information on how monitoring, assessment or evaluation information was (or will be) used to determine whether existing Treatment BMPs will be modified/enhanced, or if new/additional Treatment BMPs will be installed.
 - (4) Examples of Treatment BMPs include, but are not limited to, constructing vegetative buffer strips to capture sediment particles, constructing wet vegetative treatment systems (i.e., bioretention with underdrain), installing of filtering media, etc.

2. Other Actions Requiring SWPPP Review

- a. The permittee must review and revise the SWPPP to ensure benchmarks are met, when any of the

following conditions occur or are detected during an inspection, monitoring or other means, or the Department, EPA or the operator of the MS4 through which the permittee discharges informs the permittee that any of the following conditions have occurred, the permittee must review and revise, as appropriate, the SWPPP (e.g., sources of pollution, spill and leak procedures, non-stormwater discharges, selection, design, installation and implementation of your control measures) so that this permit's effluent limits are met and pollutant discharges are minimized:

- (1) The permittee becomes aware, or the Director determines, that the control measures are not stringent enough for the discharge to meet applicable water quality standards or the non-numeric effluent limits in this permit;
 - (2) A required control measure was never installed, was installed incorrectly, or not in accordance with Parts II. and/or VIII., or is not being properly operated or maintained;
 - (3) Whenever a visual assessment shows evidence of stormwater pollution (e.g., color, odor, floating solids, settled solids, suspended solids, foam); or
 - (4) Whenever Indicator Parameter monitoring shows evidence of ineffective control of stormwater pollution.
- b. The permittee must review the SWPPP (e.g., sources of pollution, spill and leak procedures, non-stormwater discharges, selection, design, installation, and implementation of the control measures) to determine if modifications are necessary to meet the effluent limits in this permit. If construction or a change in design, operation, or maintenance at the facility significantly changes the nature of pollutants discharged in stormwater from the facility, or significantly increases the quantity of pollutants discharged, the SWPPP must be revised.
- c. Deadlines

- (1) Immediate Actions. The permittee must document the discovery of any of the conditions listed in Parts 2.a. and 2.b. within 24 hours of making such discovery. If corrective action is needed, the permittee must immediately take all reasonable steps necessary to minimize or prevent the discharge of pollutants until a permanent solution is installed and made operational, including cleaning up any contaminated surfaces so that the material will not discharge in subsequent storm events.

Note: In this context, the term "immediately" requires you to, on the same day a condition requiring corrective action is found, take all reasonable steps to minimize or prevent the discharge of pollutants until a permanent solution is installed and made operational. However, if a problem is identified at a time in the work day when it is too late to initiate corrective action, the initiation of corrective action must begin no later than the following work day.

- (2) Subsequent Actions. If the permittee determines that additional actions are necessary beyond those implemented pursuant to Part 2.c.(1), the permittee must complete the corrective actions (e.g., install a new or modified control and make it operational, complete the repair) before the next storm event if possible, and within 14 calendar days from the time of discovery of the corrective action condition. If it is infeasible to complete the corrective action within 14 calendar days, the permittee must document why it is infeasible to complete the corrective action within the 14-day timeframe. The permittee must also identify the schedule for completing the work, which must be done as soon as practicable after the 14-day timeframe but no longer than 45 days after discovery.

Where the corrective actions result in changes to any of the controls or procedures documented in the 24 SWPPP, the permittee must modify the SWPPP accordingly within 14 calendar days of completing corrective action work.

These time intervals are not grace periods, but are schedules considered reasonable for documenting the findings and for making repairs and improvements. They are included in this permit to ensure that the conditions prompting the need for these repairs and improvements are not allowed to persist indefinitely.

- d. The permittee must document the existence of any of the conditions listed in Parts 2.a. and 2.b. within 24 hours of becoming aware of such condition. Include the following information in your documentation:
- Description of the condition triggering the need for corrective action review. For any spills or leaks, the following information must be included: a description of the incident including material, date/time, amount, location, and reason for spill, and any leaks, spills or other releases that resulted in discharges of pollutants to waters of the State;
 - Date the problem was identified; and
 - Description of immediate actions taken pursuant to Part 2.c.(1). to minimize or prevent the discharge of pollutants. For any spills or leaks, include response actions, the date/time clean-up completed, notifications made, and staff involved. Also include any measures taken to prevent the reoccurrence of such releases (see Part II.A.2.d.).

Within 14 days of discovery of any condition listed in Part III.B., the permittee must document the following information:

- The corrective actions taken or to be taken as a result of the conditions listed in Part III.B.1. or III.B.2. (or, for triggering events in Part III.B.2. where you determine that corrective action is not necessary, the basis for this determination);
- Notice of whether SWPPP modifications are required as a result of this discovery or corrective action;
- Date when corrective action was initiated; and
- Date corrective action was completed (or is expected to be completed). If applicable, document why it is infeasible to complete the necessary installations or repairs within the 14-day timeframe and document your schedule for installing the controls and making them operational as soon as practicable after the 14- day timeframe but not longer than 45 days after discovery.

The permittee must submit this documentation in an annual report as required in Part VII.D. and retain a copy onsite with the SWPPP as required in Part V.I.

3. Substantially Identical Outfalls

If the event triggering corrective action is linked to an outfall that represents other substantially identical outfalls, the permittee's review must assess the need for corrective action for each outfall represented by the outfall that triggered the review or corrective action. Any necessary changes to control measures that affect these other outfalls must also be made before the next storm event if possible, or as soon as practicable following that storm event.

4. Compliance with Other Ordinances, Laws and Permits

The requirement to implement Corrective Actions does not remove the permittee's obligation to obtain

any local, state, or federal approvals or permits required by ordinance or law and does not relieve the permittee from any duties owed to adjacent landowners with specific reference to any changes in drainage.

APPENDIX 2

PFAS Analyte List

Target Analyte Name	Abbreviation	CAS Number
Perfluoroalkyl carboxylic acids		
Perfluorobutanoic acid	PFBA	375-22-4
Perfluoropentanoic acid	PFPeA	2706-90-3
Perfluorohexanoic acid	PFHxA	307-24-4
Perfluoroheptanoic acid	PFHpA	375-85-9
Perfluorooctanoic acid	PFOA	335-67-1
Perfluorononanoic acid	PFNA	375-95-1
Perfluorodecanoic acid	PFDA	335-76-2
Perfluoroundecanoic acid	PFUnA	2058-94-8
Perfluorododecanoic acid	PFDoA	307-55-1
Perfluorotridecanoic acid	PFTTrDA	72629-94-8
Perfluorotetradecanoic acid	PFTeDA	376-06-7
Perfluoroalkyl sulfonic acids		
Acid Form		
Perfluorobutanesulfonic acid	PFBS	375-73-5
Perfluoropentanesulfonic acid	PFPeS	2706-91-4
Perfluorohexanesulfonic acid	PFHxS	355-46-4
Perfluoroheptanesulfonic acid	PFHpS	375-92-8
Perfluorooctanesulfonic acid	PFOS	1763-23-1
Perfluorononanesulfonic acid	PFNS	68259-12-1
Perfluorodecanesulfonic acid	PFDS	335-77-3
Perfluorododecanesulfonic acid	PFDoS	79780-39-5
Fluorotelomer sulfonic acids		
1H,1H, 2H, 2H-Perfluorohexane sulfonic acid	4:2FTS	757124-72-4
1H,1H, 2H, 2H-Perfluorooctane sulfonic acid	6:2FTS	27619-97-2
1H,1H, 2H, 2H-Perfluorodecane sulfonic acid	8:2FTS	39108-34-4
Perfluorooctane sulfonamides		
Perfluorooctanesulfonamide	PFOSA	754-91-6
N-methyl perfluorooctanesulfonamide	NMeFOSA	31506-32-8
N-ethyl perfluorooctanesulfonamide	NEtFOSA	4151-50-2
Perfluorooctane sulfonamidoacetic acids		
N-methyl perfluorooctanesulfonamidoacetic acid	NMeFOSAA	2355-31-9
N-ethyl perfluorooctanesulfonamidoacetic acid	NEtFOSAA	2991-50-6
Perfluorooctane sulfonamide ethanols		
N-methyl perfluorooctanesulfonamidoethanol	NMeFOSE	24448-09-7
N-ethyl perfluorooctanesulfonamidoethanol	NEtFOSE	1691-99-2
Per- and Polyfluoroether carboxylic acids		
Hexafluoropropylene oxide dimer acid	HFPO-DA	13252-13-6
4,8-Dioxa-3H-perfluorononanoic acid	ADONA	919005-14-4
Perfluoro-3-methoxypropanoic acid	PFMPA	377-73-1
Perfluoro-4-methoxybutanoic acid	PFMBA	863090-89-5
Nonafluoro-3,6-dioxaheptanoic acid	NFDHA	151772-58-6

Target Analyte Name	Abbreviation	CAS Number
Ether sulfonic acids		
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	9Cl-PF3ONS	756426-58-1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	11Cl-PF3OUdS	763051-92-9
Perfluoro(2-ethoxyethane)sulfonic acid	PFEESA	113507-82-7
Fluorotelomer carboxylic acids		
3-Perfluoropropyl propanoic acid	3:3FTCA	356-02-5
2H,2H,3H,3H-Perfluorooctanoic acid	5:3FTCA	914637-49-3

RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
235 PROMENADE STREET
PROVIDENCE, RHODE ISLAND 02908

STATEMENT OF BASIS

RHODE ISLAND POLLUTANT DISCHARGE ELIMINATION SYSTEM (RIPDES) PERMIT TO
DISCHARGE TO WATERS OF THE STATE

RIPDES PERMIT NO. **RI0023485**

NAME AND ADDRESS OF APPLICANT:

Metals Recycling, LLC
P.O. Box 19726
Johnston, RI 02919

NAME AND ADDRESS OF FACILITY WHERE DISCHARGE OCCURS:

Metals Recycling, LLC
89 Celia Street
Johnston, RI 02919

RECEIVING WATER: **Woonasquatucket River and Tributaries**

WATERBODY ID: **RI0002007R-10C**

CLASSIFICATION: **B1**

STATEMENT OF BASIS
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I. PROPOSED ACTION, TYPE OF FACILITY, AND DISCHARGE LOCATION

The above-named applicant has applied to the Rhode Island Department of Environmental Management (DEM) for re-issuance of a RIPDES Permit to discharge into the designated receiving water. The facility engages in scrap recycling and storage. The discharge consists of stormwater from the facility and its associated parking and storage areas, which enters the stormwater treatment system, and is ultimately discharged to the Woonasquatucket River.

II. DESCRIPTION OF DISCHARGE

A quantitative description of the discharge by significant effluent parameters based on monitoring data from the period beginning April 2015 through the period ending December 2024 can be found in Attachment A.

III. PERMIT BENCHMARKS AND CONDITIONS

The effluent benchmark values, monitoring requirements, and any implementation schedule (if required) may be found in the permit and the following appendices.

IV. PERMIT BASIS AND EXPLANATION OF EFFLUENT BENCHMARK DERIVATION**Facility Description**

Metals Recycling, L.L.C. owns and operates a facility used for the recycling of scrap metal, which is located at 89 Celia Street, Johnston. Operations conducted at the facility include processing, separating, sorting, and stockpiling scrap metal and associated by-products. As part of these operations, automobiles are transported to the facility, any hazardous materials and automotive fluids are removed from the vehicles, the vehicles are shredded, and the shredded materials are sorted prior to being transported off-site for further processing. In accordance with Rule 32(b)(3)(I)(A) of the RIPDES Regulations, it has been determined that the facility is a significant contributor of pollutants and has, therefore, been required to obtain an individual RIPDES permit. In an October 16, 2025 letter to DEM, Metals Recycling LLC stated that the facility ceased shredding and scrap metal storage operations in 2015. DEM will continue to permit the facility as having the capability to shred vehicles but has made a few modifications to the permit to account for the current operations. The modifications are described in the Permit Limit Development and Benchmark Monitoring Requirements section.

Stormwater Treatment System

Improvements were made at the site on September 2, 2005 which included the installation of a stormwater collection system and a stormwater treatment system using two (2) on-site oil/water separators (OWS-1 and OWS-2) and three (3) solids separation units (TSS-1, TSS-2, and TSS-03), designed to treat stormwater runoff for suspended solids and oil and grease. During the development of a previous permit, a review of Metals Recycling, LLC's benchmark monitoring results for the period covering September 15, 2005 through September 26, 2008 revealed that average discharge concentrations exceeded benchmark concentrations for BOD (Biochemical Oxygen Demand), COD (Chemical Oxygen Demand), Total Copper, Total Lead, Total Aluminum, Total Iron, Total Zinc, and PCB 1242. This data demonstrated even after the September 2005 installation of the stormwater collection and treatment system, Metals Recycling, LLC. continued to have difficulties bringing the discharges from outfall 001A into compliance with the benchmark concentrations established in the permit issued on November 20, 2003. As a result, the DEM required Metals Recycling, LLC to conduct an engineering evaluation and propose a schedule for implementing changes to the structural stormwater controls that would be capable of bringing the facility into compliance with the benchmark concentrations established in the June 17, 2009 permit.

Additional structural stormwater upgrades were approved by DEM and subsequently constructed and implemented in 2012. The purpose of the system upgrade was to reduce the concentrations of constituents in stormwater to the point where the facility complies with the benchmarks established in the permit. The upgraded system was constructed to be operated downstream of the existing system (i.e. the influent to

the 2012 treatment system additions is the effluent from the system constructed in 2005). The system has been designed to treat the water quality volume from the industrial operations area of the Site (1 inch of rain over the impervious area, approximately 350,000 gallons) at a peak flow rate of 6,000 gallons per minute (gpm), equal to a rainfall rate of approximately 1 inch per hour. The primary components of the new system constructed in 2012 consist of a pump station and associated force main, an aeration tank with associated blower equipment, and a forebay and bioretention swale.

Since the 2012 upgrades, compliance monitoring is required to take place at Manhole MH-5T, a location that is representative of the final discharge from the Stormwater Collection and Treatment System. In 2021, further stormwater management system upgrades retrofit Manhole MH-1T with a pipe elbow to raise the manhole outlet to 74.03 ft, preventing backflow. Additionally, two malfunctioning pumps were replaced to prevent further malfunction. Discharge leaves the property via Outfall 001A (discharge from the stormwater collection and treatment system located after manhole MH-1) as identified in Metals Recycling LLC's 2024 Comprehensive Site Evaluation Report. Attachment D shows a site plan delineating the location of the treatment system equipment, sampling location at manhole MH-5T and the outfall location at MH-1T, and the ultimate discharge to the waterbody via an existing industrial storm drain.

Receiving Water Description

Metals Recycling, LLC discharges to the Woonasquatucket River located in Smithfield, Johnston, North Providence, and Providence. This segment of the Woonasquatucket River and tributaries starts at the Smithfield Wastewater Treatment Facility discharge point at Esmond Mill Drive and ends at the Combined Sewer Overflow outfall at Glenbridge Avenue in Providence. The Waterbody ID is RI0002007R-10C. This segment of the Woonasquatucket River is listed on DEM's 2024 303(d) List of Impaired Water Bodies (dated April 2024) as being impaired for dioxin, dissolved oxygen, mercury, non-native aquatic plant, polychlorinated biphenyls (PCBs), mercury in fish tissue, and fecal coliform. This waterbody is subject to a 2007 TMDL addressing fecal coliform and dissolved metals.

This waterbody segment is classified as a freshwater Class B1 waterbody according to the Rhode Island Water Quality Regulations. Class B1 waters are designated for primary and secondary contact recreation activities and fish and wildlife habitat. They shall be suitable for compatible industrial processes and cooling, hydropower, aquacultural uses, navigation, and irrigation and other agricultural uses. Class B1 waters shall have good aesthetic value. Primary contact recreational activities may be impacted due to pathogens from approved wastewater discharges. However, all Class B criteria must be met.

Permit Limit Development and Benchmark Monitoring Requirements

DEM's primary authority over this permit comes from the Environmental Protection Agency's (EPA's) delegation of the RIPDES program, in September 1984, under the Federal Clean Water Act. The requirements set forth in this draft permit are from the State's Water Quality Regulations and the State's Regulations for the Rhode Island Pollutant Discharge Elimination System, both filed pursuant to Chapter 46-12, of the Rhode Island General Laws, as amended.

The permit requires that all fluids and hazardous wastes be removed from vehicles prior to dismantling and/or further processing. Additionally, this permit also requires that Metals Recycling, LLC comply with the latest Stormwater Pollution Prevention Plan (SWPPP) developed for the facility. The SWPPP includes, but is not limited to, a description of the pollution controls as well as maintenance activities necessary to properly control stormwater runoff. All required inspections and maintenance must also be conducted as specified in the site-specific Stormwater Treatment System Operation and Maintenance Plan and SWPPP. This includes maintenance on the following Stormwater Treatment System components: Swirl Concentrators, Oil Water Separators, Pump Station, Aeration Tank, Aeration Blower, Sediment Forebay, and Bioretention Swale.

When developing effluent limits for RIPDES Permits, DEM is required to consider limits based on the technology available to treat the pollutants (technology-based limits) and limits that are protective of the designated uses of the receiving water (water quality-based limits). EPA and DEM regulations require

RIPDES permits to contain effluent limits that are more stringent than technology-based limits where more stringent limits are necessary to maintain or achieve Federal or State water quality standards. The permit must also limit any pollutants that are or may be discharged at levels that caused, have the reasonable potential to cause, or contribute to an excursion above any water quality criterion. An excursion occurs if the projected or actual in stream concentrations exceed the applicable criterion.

Effluent limitations are not defined exclusively as numeric Water-Quality Based Effluent Limitations (WQBELs). Section 502 of the CWA defines “effluent limitations” as “any restriction established by a State or the Administrator on quantities, rates, and concentrations of ... other constituents which are discharged from point sources”. Therefore, although RIPDES permits must contain conditions to ensure that water quality standards are met, DEM can use narrative conditions and best management practices (BMPs) to achieve this requirement. These BMPs may include treatment requirements, operating procedures, and practices to control site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

This concept is further outlined in the EPA’s Interim Permitting Approach for Water Quality-Based Effluent Limitations in Stormwater Permits guidance document. This document states that it is appropriate for stormwater discharge permits to “use best management practices (BMPs) in first-round stormwater permits and expanded or better-tailored BMPs in subsequent permits, where necessary”. The EPA supports the use of BMP-based permits since “numeric limitations for stormwater permits can be very difficult to develop at this time because of the existing state of knowledge about the intermittent and variable nature of these types of discharges and their effects on receiving waters” and since the current methodologies for developing WQBELs “were designed primarily for process wastewater discharges which occur at predictable rates with predictable pollutant loadings under low flow conditions in receiving waters”.

The RIPDES Regulations (RI Code of Regulations: RIPDES 250-RICR-150-10-1-16.A) state that each permit shall contain conditions, when applicable, to adopt BMPs to control or abate the discharge of pollutants when: authorized under Section 402(p) of CWA for the control of stormwater discharges. Therefore, this permit contains terms and conditions to ensure that the permittee implements appropriate BMPs and a SWPPP as the key strategies to assure compliance with water quality standards.

This permit authorizes the discharge of stormwater and certain allowable non-stormwater discharges. Non-stormwater discharges that are authorized under this permit are limited to those described in Part I.A.4 of the permit document. The list of allowable non-stormwater discharges has been updated from the list found in the 2015 permit to align with the allowable non-stormwater discharges in DEM’s 2024 Multi-Sector General Permit (MSGP) for industrial stormwater as they reflect the operation of this facility. If any of those listed discharges may reasonably be expected to be present and to be mixed with stormwater discharges, they must be specifically identified and addressed in the facility’s Stormwater Pollution Prevention Plan.

Selection of Pollutants of Concern

As indicated above, RIPDES permits may contain narrative conditions and best management practices (BMPs) to ensure that water quality standards will be met. These BMPs may include operating procedures and practices to control site runoff, spillage or leaks, sludge or waste disposal, or drainage. However, it is necessary to identify the specific pollutants that will be used to monitor the permittee’s effectiveness in implementing the BMPs. When determining the specific pollutants of concern, DEM compared historical discharge data reported through NetDMR and the Woonasquatucket River’s list of impairments. The previous permit had evaluated the pollutant contributions of various pollutant sources in the watershed along with land use and impaired water status to determine that Chemical Oxygen Demand (COD), Total Suspended Solids (TSS), pH, Oil and Grease, Total Copper, Total Lead, Total Aluminum, Total Iron, Total Zinc, and various PCBs (1016, 1221, 1232, 1242, 1248, 1254, and 1260) were pollutants of concern that should be monitored. This permit requires monitoring for all the same parameters while adding Total Phosphorus and Enterococci monitoring and removing monitoring requirements for pH and Total Iron.

COD, TSS, Total Aluminum, Total Copper, Total Lead, Total Zinc, PCB-1016, PCB-1221, PCB-1232, PCB-

1242, PCB-1248, PCB-1254, PCB-1260, and Oil and Grease monitoring requirements are consistent with the monitoring requirements established in the 2024 RIPDES Multi-Sector General Permit for Stormwater Discharge Associated with Industrial Activity (MSGP), for Subsector N1 - Scrap Recycling and Waste Recycling Facilities (SIC 5093). In addition, this segment of the Woonasquatucket River is listed as being impaired for dioxin, dissolved oxygen, mercury, PCBs, and fecal coliform in the 2024 Impaired Waters Report. Facilities discharging to an impaired water must monitor for all pollutants for which the waterbody is impaired, and for which a standard analytical method exists. Therefore, enterococcus and COD are pollutants of concern and must be monitored according to the appropriate analytical method described in 40 CFR Part 136. DEM is requiring that the permittee monitor for enterococci rather than fecal coliform as enterococci is currently the preferred bacteria indicator for recreational use according to the Rhode Island Water Quality Regulations. Total Phosphorus monitoring has been added due to the dissolved oxygen impairment of the waterbody. As detailed in the Benchmark Monitoring section, monitoring for PCBs is now conditional depending on the facility's operations.

DEM is removing pH, Total Iron, and Total Mercury monitoring requirements from this permit. DEM reviewed the pH data submitted by this facility between 2015 and 2024 and found that the pH data were all within the acceptable pH range. Any excursions beyond the pH benchmark can be attributed to causes outside of the facility's control, such as acid rain. The Total Iron monitoring was removed to be consistent with the 2024 MSGP for Sector N1. Additionally, DMR data submitted since 2020 has been less than half the relevant benchmark indicating that Total Iron is not a pollutant of concern for this facility. The Total Mercury monitoring was removed after analyzing the DMR data submitted since 2015. There has not been any mercury detected in facility discharge since 2015, therefore Total Mercury is not a pollutant of concern for this facility. Attachment C summarizes the annual DMR data averages from 2015 to 2024.

While the Woonasquatucket River is impaired for Dioxin, monitoring for Dioxin is excluded because Metals Recycling LLC's processes do not generate Dioxin. All other parameters for which impairments exist are included in the list of parameters for which monitoring is required.

Monitoring and Reporting Protocol

Consistent with 250-RICR-150-10-1.14.K, the required monitoring protocols are described in the permit document in Part I.A and Part I.H.1. The monitoring protocol has been updated from the previous permit reissuance such that the current monitoring protocols are consistent with the 2024 MSGP. Changes to the monitoring protocol include a switch from quarterly to semi-annual monitoring and reporting. The permittee must collect two (2) samples per six (6) months. Additionally, the antecedent dry period requirement has been reduced from 72 hours (3 days) to 48 hours (2 days). This change intends to increase the number of sampling opportunities and improve flexibility for the facility to comply with the monitoring requirements. Part I.H.1 of the permit reflects the changes made to the reporting requirements. The reporting period has changed from quarterly reports to twice per year (once every six (6) months). Electronic reporting via NetDMR is required.

Benchmark exceedances during any single monitoring period no longer trigger a reevaluation of the SWPPP or its implementation. With the reissuance of this permit, corrective actions as described in Part I.D.2 and Appendix 1 of the permit shall take effect if the average of a calendar year of monitoring results exceeds the benchmark value of any one pollutant.

Benchmark Monitoring

Due to the difficulty in determining which pollutants may have reasonable potential to cause a water quality violation, based on the intermittent nature of stormwater discharges, the DEM does not typically establish numeric water quality-based effluent limits for stormwater discharges. Instead, the DEM uses benchmark monitoring to monitor the quality of the stormwater discharges. Benchmark monitoring concentrations are not permit limits and are not directly correlated to water quality standards. Instead, they are generic pollutant levels that EPA developed to be protective of water quality under nearly all scenarios. The DEM applies these benchmarks across stormwater discharges covered by both individual and general permits. The 2024 MSGP was used as a basis for comparison. As described in the Fact Sheet for the 2024 MSGP,

benchmarks are target concentrations that are intended to assist facilities in determining whether their pollution control measures are adequate to protect water quality. A benchmark exceedance does not necessarily indicate that a discharge is causing or contributing to a violation of an instream water quality standard, but it does require that the facility evaluate control measures and follow-up corrective actions by triggering a review of the facility's stormwater controls by modifying such controls as necessary.

Benchmark concentrations for COD, TSS, Total Copper, Total Lead, Total Aluminum, Total Zinc, and PCBs (1016, 1221, 1232, 1242, 1248, 1254, and 1260) are included in this permit. Benchmarks for COD, TSS, PCBs (1016, 1221, 1232, 1242, 1248, 1254, and 1260), Total Copper, Total Lead, and Total Zinc are consistent with benchmarks established in the 2024 MSGP permit for Sector N1. The benchmark value for PCB 1016 has been reduced slightly from the previous permit to remain consistent with the 2024 MSGP.

The benchmarks for Total Copper, Total Lead, and Total Zinc are hardness dependent. Hardness is defined as the concentration of calcium carbonate (CaCO_3) in the water column and has the units of milligram per liter (mg/L). Freshwater aquatic life criteria for certain metals are expressed as a function of hardness because hardness and/or water quality characteristics that are usually correlated with hardness can affect the toxicities of some metals. Increasing hardness has the effect of decreasing toxicity of certain metals to aquatic life. Waterbody hardness data collected from upstream monitoring stations from 2009 to present shows that on average, the waterbody hardness value is 46.7 mg/L. Consistent with the April 2007 Rhode Island Department of Environmental Management Woonasquatucket River Fecal Coliform Bacteria and Dissolved Metals Total Maximum Daily Loads Report, the waterbody falls into the 25 mg/L to 50 mg/L hardness range. Benchmarks were selected using a hardness range of 25-50 mg/L as CaCO_3 from Table D-1 in Appendix D of the 2024 MSGP. Hardness data is attached to this document as Attachment B. For water hardness in the range of 25-50 mg/L, the applicable benchmark monitoring concentrations for Copper, Lead, and Zinc are 0.0056 mg/L, 0.023 mg/L, and 0.05 mg/L respectively. These benchmark monitoring concentrations have been included in the permit and can be found in Part I.D.

Benchmarks for pH, Total Iron, and Total Mercury have been removed from this permit. Their inclusion is not consistent with stormwater benchmarks as found in Sector N of the 2024 MSGP. The waterbody is not impaired for pH or Total Iron. Collected DMR data shows that Total Mercury is not a pollutant of concern for the facility, so the benchmark has been removed from this permit. Additionally, past reporting has shown results well within compliance as seen in Attachment C.

Metals Recycling LLC has reported that the facility has not shredded vehicles since 2015. When the shredder is not operating, the facility's operations are similar to those under Sector M – Automobile Salvage Yards of the 2024 RIPDES MSGP permit. Sector M does not contain PCB monitoring requirements and benchmarks. Additionally, while Section M contains copper monitoring requirements, there are no benchmarks for copper. As seen in Attachment C, all PCB monitoring has been below detection limits since 2019. Accordingly, DEM is only requiring PCB monitoring and benchmark comparison when the shredder is operating. Since Copper monitoring data has been below benchmarks and copper benchmarks are not included in Sector M, DEM is only requiring benchmark comparisons for copper when the shredder is operating. Metals Recycling LLC is required to notify DEM in writing at least thirty (30) days prior to the start of shredding operations. Once shredding begins, monitoring and/or benchmark comparison for copper and PCBs, as applicable, shall continue until further written notice from DEM that monitoring and/or benchmark comparison is no longer required.

A review of Metals Recycling, LLC's quarterly effluent data was conducted using data from the previous permit issuance in 2015 to 2024. These effluent results show that the facility can meet the permit benchmark values in this permit. This analysis can be found in Attachment C where the annual average of the effluent data for each parameter is compared to the relevant benchmark value.

Any exceedances of the benchmark values shall trigger a review of the facility's SWPPP by the permittee and modification as necessary to reduce the pollutant concentrations in the discharge to levels below the benchmark concentrations. A list of corrective actions and best practices has been added to this permit as an appendix reissuance to guide the facility's SWPPP modifications.

Impaired Waters Monitoring

The permit allows Metals Recycling, LLC to request that DEM remove the monitoring requirements for several pollutants where monitoring is required only because the waterbody is impaired for these pollutants. Specifically, a permit condition has been added to Part 1.A.1 that allows the permittee to discontinue monitoring for Total Phosphorus, or Enterococci after two (2) consecutive monitoring periods (i.e., 12 consecutive months and at least four samples) if the pollutant is not detected in the discharge (i.e., non-detect using sufficiency sensitive detection limits). The permittee must notify DEM in writing (i.e., cover letter and analytic reports). Sampling can only be eliminated after DEM provides written approval. DEM and the permittee must ensure that any approved TMDL or other water quality determination does not have specific instructions to the contrary, in which case the permittee must follow those instructions.

Regarding other impairments to this segment of the Woonasquatucket River, Metals Recycling, LLC is required to continue sample for COD and PCBs regardless of the monitoring results because the sector is a known source of these pollutants. The facility is not required to sample for Dioxin because it is not expected to be a source of Dioxin.

Technology-Based Permit Requirements

The above-mentioned facility is not subject to any federal effluent guidelines.

The Clean Water Act requires that discharges from existing facilities, at a minimum, must meet technology-based effluent limitations reflecting, among other things, the technological capability of permittees to control pollutants in their discharges. Both technology-based and water quality-based effluent limitations and benchmark values are implemented through NPDES permits. The technology-based conditions listed in Part I.B.4 of the permit are based on and consistent with the 2024 RIPDES MSGP. This section of the permit consists of control measures which can be actions (including processes, procedures, schedules of activities, prohibitions on practices and other management practices) or structural or installed devices to prevent or reduce water pollution. In this permit, the permittee is required to select, design, install, implement, and maintain site-specific control measures to meet these benchmarks.

BPJ-Based Permit Limits and Requirements

The 15 mg/l daily maximum Oil and Grease limit was established based on Best Professional Judgement (BPJ) and is equivalent to the new source performance standard that the Environmental Protection Agency (EPA) has established for most industry groups. This standard represents the level of control achievable by the best available demonstrated control technology, process, operating method, or other alternative for the removal of oil and grease. This limit is also consistent with the American Petroleum Institute (API) oil/water separator guidelines and is consistent with the limits that DEM typically assigns to discharges of storm water that is treated through an oil/water separator.

Average daily and maximum monthly flow monitoring and reporting are also required in the permit.

Based on BPJ, the DEM has assigned a requirement that the facility develop and implement a Stormwater Pollution Prevention Plan (SWPPP).

Antibacksliding and Antidegradation

Provided below is a brief introduction to antibacksliding and antidegradation, as well as a discussion on how the two policies were used to calculate water quality-based limits.

Antibacksliding

Antibacksliding restricts the level of relaxation of water quality-based limits from the previous permit. Section 303(d)(4) of the Clean Water Act addresses antibacksliding as the following:

1. Standards not attained – For receiving waters that have not attained the applicable water quality standards, limits based on a TMDL or WLA can only be revised if the water quality standards will be met. This may be done by (i) determining that the cumulative effect of all such revised limits would assure the attainment of such water quality standards; or (ii) removing the designated use which is not being attained in accordance with regulations under Section 303.
2. Standards attained – For receiving waters achieving or exceeding applicable water quality standards, limits can be relaxed if the revision is consistent with the State's Antidegradation Policy.

Therefore, in order to determine whether backsliding is permissible, the first question that must be asked is whether or not the receiving water is attaining the water quality standard. The DEM has determined the most appropriate evaluation of existing water quality is by calculating pollutant levels, which would result after the consideration of all currently valid RIPDES permit limits or historic discharge data (whichever is greater), background data (when available), and any new information (i.e., dilution factors).

Antidegradation

The DEM's "Policy on the Implementation of the Antidegradation Provisions of the Rhode Island Water Quality Regulations July 2006" (the Policy) established four tiers of water quality protection:

Tier 1. In all surface waters, existing uses and the level of water quality necessary to protect the existing uses shall be maintained and protected.

Tier 2. In waters where the existing water quality criteria exceeds the levels necessary to support the propagation of fish, wildlife, and recreation in and on the water, that quality shall be maintained and protected except for insignificant changes in water quality as determined by the Director and in accordance with the Antidegradation Implementation Policy, as amended. In addition, the Director may allow significant degradation, which is determined to be necessary to achieve important economic or social benefits to the State in accordance with the Antidegradation Policy.

Tier 2½. Where high quality waters constitute Special Resource Protection Waters SRPWs¹, there shall be no measurable degradation of the existing water quality necessary to protect the characteristics which cause the waterbody to be designated a SRPW. Notwithstanding that all public drinking water supplies are SRPWs, public drinking water suppliers may undertake temporary and short-term activities within the boundary perimeter of a public drinking water supply impoundment for essential maintenance or to address emergency conditions in order to prevent adverse effect on public health or safety. These activities must comply with the requirements set forth in Tier 1 and Tier 2.

Tier 3. Where high quality waters constitute an Outstanding Natural Resource ONRWs², that water quality shall be maintained and protected. The State may allow some limited activities that result in temporary or short-term changes in the water quality of an ONRW. Such activities must not permanently degrade water quality or result in water quality lower than necessary to protect the existing uses in the ONRW.

The formulas previously presented ensure that permit limitations are based upon water quality criteria and methodologies established to ensure that all designated uses will be met.

In terms of the applicability of Tier 2 of the Policy, a water body is assessed as being high quality on a parameter-by-parameter basis. In accordance with Part II of the Policy, "Antidegradation applies to all new or increased projects or activities which may lower water quality or affect existing water uses, including but not limited to all 401 Water Quality Certification reviews and any new, reissued, or modified RIPDES permits." Part VI.A of the Policy indicates that it is not applicable to activities which result in insignificant (i.e., short-term minor) changes in water quality and that significant changes in water quality will only be

¹ SRPWs are surface waters identified by the Director as having significant recreational or ecological uses.

² ONRWs are a special subset of high-quality water bodies, identified by the State as having significant recreational or ecological water uses.

allowed if it is necessary to accommodate important economic and social development in the area in which the receiving waters are located (important benefits demonstration). Part VI.B.4 of the Policy states that: "Theoretically, any new or increased discharge or activity could lower existing water quality and thus require the important benefits demonstration. However, DEM will: 1) evaluate applications on a case-by-case basis, using BPJ and all pertinent and available facts, including scientific and technical data and calculations as provided by the applicant; and 2) determine whether the incremental loss is significant enough to require the important benefits demonstration described below. [If not then as a general rule DEM will allocate no more than 20%.] Some of the considerations which will be made to determine if an impact is significant in each site specific decision are: 1) percent change in water quality parameter value and their temporal distribution; 2) quality and value of the resource; 3) cumulative impact of discharges and activities on water quality to date; 4) measurability of the change; 5) visibility of the change; 6) impact on fish and wildlife habitat; and 7) impact on potential and existing uses. As a general guide, any discharge or activity which consumes greater than 20% of the remaining assimilative capacity may be deemed significant and invoke full requirements to demonstrate important economic or social benefits."

In terms of a RIPDES permit, an increased discharge is defined as an increase in any limitation, which would result in an increased mass loading to a receiving water. The baseline for this comparison would be the monthly average mass loading established in the previous permit. It would be inappropriate to use the daily maximum mass loading since the Policy is not applicable to short-term changes in water quality.

For the purposes of ensuring that the revised limit is consistent with the requirements of antidegradation, existing water quality must be defined. As explained earlier, DEM evaluates existing water quality by determining the pollutant levels which would result under the design conditions appropriate for the particular criteria (i.e., background water quality, when available and/or appropriate, non-point source inputs; and existing RIPDES permit limitations or recent historical discharge data, whichever is higher). In general, available data would be used to make this determination.

Use the above-mentioned criteria, the present instream water quality C_p is defined as:

$$C_p = \frac{(DF - 1) \cdot C_B + (1 \cdot C_d)}{DF}$$

where: C_B = background concentration³

C_d = discharge data⁴

DF = dilution factor

Although this permit sets forth benchmark values as opposed to numerical limits, the antibacksliding and antidegradation policies still apply. In this permit, all benchmark values and effluent limits are either the same as or more stringent than the limits in the 2015 permit. Therefore, the limits contained in this permit are consistent with the Department's anti-degradation policy.

Emerging Contaminants

PFAS are a group of synthetic chemicals that have been in use since the 1940s. They are found in a wide array of consumer and industrial products. Airports can be contributors of PFAS releases into the air, soil, and water. Exposure to some PFAS above certain levels may increase risk of adverse health effects⁵. DEM is collecting information to evaluate the potential impacts that discharges of PFAS from various industrial dischargers may have on downstream uses, which can include drinking water, recreational and aquatic life

³ Data collected at a location that is unimpacted by significant point source discharges.

⁴ Discharge data refers to the maximum of the permit limit or the historic discharge level. The historic discharge level is determined by calculating the upper 95th confidence interval for the monthly average reported data for the past five (5) years. For specific cases, changes in treatment efficiency or pretreatment limitations may support the use of an alternative period of time.

⁵ 5 EPA, EPA's Per- and Polyfluoroalkyl Substances (PFAS) Strategic Roadmap: EPA's Commitments to Action 2021-2024, EPA-100-K-21-002, October 2021. https://www.epa.gov/system/files/documents/2021-10/pfas-roadmap_final-508.pdf

uses depending on the receiving water.

In 2022, Rhode Island passed a law concerning PFAS in drinking water, groundwater, and surface waters. The Rhode Island law establishes monitoring requirements for public water supplies as well as treatment requirements if the sum of the concentrations of the following six species of PFAS exceed 20 parts per trillion (ppt).

Perfluorohexanesulfonic acid (PFHxS)
Perfluoroheptanoic acid (PFHpA)
Perfluorononanoic acid (PFNA)
Perfluorooctanesulfonic acid (PFOS)
Perfluorooctanoic acid (PFOA)
Perfluorodecanoic acid (PFDA)

The 2022 Rhode Island law is consistent with the MassDEP public drinking water standard regarding allowable concentrations and PFAS species. In addition to drinking water requirements, the 2022 Rhode Island law also compels DEM to adopt a groundwater quality standard and a surface water action level by December 31, 2023.

Although the Rhode Island Water Quality Regulations (250-RICR-150-05-1) do not include numeric criteria for PFAS, the RI Water Quality Regulations § 1.10(D)(1) under Chemical Constituents have narrative requirements that prohibits the discharge of pollutants in concentration or combinations that could be harmful to humans or fish and wildlife for the most sensitive and governing water class use.

Since PFAS chemicals are persistent in the environment and may lead to adverse human health and environmental effects, the Permit requires that the facility conduct quarterly sampling at the major outfalls (Outfalls 002A, 003A, 008A, and 010A) and semi-annual sampling at the minor outfalls (Outfalls 001A, 004A, 006A, 007A, 009A, 011A, 012A, and 013A) for PFAS chemicals using draft EPA Method 1633 until a 40 CFR Part 136 approved test method is made available to the public.

The purpose of this monitoring and reporting requirement is to quantify potential discharges of PFAS from this facility and to inform future permitting decisions. DEM is authorized to require this monitoring and reporting by CWA § 308(a), which states:

“SEC. 308. (a) Whenever required to carry out the objective of this Act, including but not limited to (1) developing or assisting in the development of any effluent limitation, or other limitation, prohibition, or effluent standard, pretreatment standard, or standard of performance under this Act; (2) determining whether any person is in violation of any such effluent limitation, or other limitation, prohibition or effluent standard, pretreatment standard, or standard of performance; (3) any requirement established under this section; or (4) carrying out sections 305, 311, 402, 404 (relating to State permit programs), 405, and 504 of this Act—(A) the Administrator shall require the owner or operator of any point source to (i) establish and maintain such records, (ii) make such reports, (iii) install, use, and maintain such monitoring equipment or methods (including where appropriate, biological monitoring methods), (iv) sample such effluents (in accordance with such methods, at such locations, at such intervals, and in such manner as the Administrator shall prescribe), and (v) provide such other information as he may reasonably require...”

Since an EPA method for sampling and analyzing PFAS in wastewater is not currently available, the permit requires that PFAS be analyzed using draft EPA method 1633 until a 40 CFR Part 136 approved test method for wastewater is made available to the public. This approach is consistent with 40 CFR § 122.44(i)(1)(iv)(B) which states that in the case of pollutants or pollutant parameters for which there are no approved methods under 40 CFR Part 136 or methods are not otherwise required under 40 CFR chapter I, subchapter N or O, monitoring shall be conducted according to a test procedure specified in the permit for such pollutants or pollutant parameters. After one year of monitoring for the quarterly sampled outfalls or two years of monitoring for the semi-annual sampled outfalls, if all samples are non-detect for all forty PFAS

compounds, using draft EPA Method 1633 until a 40 CFR Part 136 approved test method is made available to the public, the permittee may request to remove the requirements for PFAS monitoring.

As detailed in Part I.A.7 of the permit, DEM also requires a one-time PFAS sample to determine the potential PFAS contamination from the facility. The facility shall test for all forty PFAS parameters listed in Appendix 2 of the permit.

Additional Permit Requirements

Consistent with the 2015 issuance of this permit, the 2024 permit requires that inspections of the stormwater controls be conducted in a manner consistent with the updated SWPPP requirements found in Part I.B. The SWPPP requirements have been updated to remain consistent with RIPDES policy and the MSGP permit. Key inspections and their minimum frequencies are indicated in the reissuance in Part I.C. An annual comprehensive site evaluation report is still required, submitted to the DEM by January 15th of each year, for the previous calendar year. These reports must summarize the results of the site inspections required under the permit. With the authorization of this permit, the facility must amend the current SWPPP to comply with the updated requirements described in Part I.B of the permit and submit this document to the DEM within 90 days.

Following any condition which triggers corrective actions, such as benchmark exceedances, the facility must implement corrective actions as described in Appendix 1 of the permit. These corrective actions are consistent with the 2024 MSGP. The facility is to follow the corrective action framework to prevent repeated benchmark exceedances. Additional corrective actions shall be implemented as necessary and as described in Appendix 1. Years without annual average benchmark exceedances do not require corrective actions. Corrective Actions must be summarized and submitted to DEM with the annual Comprehensive Site Evaluation Report. Should the required corrective actions require SWPPP amendments, the facility shall resubmit the updated SWPPP to the DEM.

The remaining general and specific conditions of the permit are based on the RIPDES Regulations (RI Code of Regulations: 250-RICR-150-10) as well as 40 CFR Parts 122 through 125 and consist primarily of requirements common to all stormwater permits.

Permit Monitoring Summary

Presented in Table 1 is a summary of the permit sampling frequencies.

Table 1: Final Permit Monitoring Requirements – Outfall 001A

Parameter	Average Monthly	Maximum Daily	Minimum	Maximum
Flow	--- GPD	--- GPD		
COD			--- mg/L	--- mg/L
TSS			--- mg/L	--- mg/L
Phosphorous, Total			--- mg/L	--- mg/L
Enterococci			--- cfu/100 mL	--- cfu/100 mL
Oil and Grease			--- mg/L	15 mg/L
Copper, Total			--- mg/L	--- mg/L
Lead, Total			--- mg/L	--- mg/L
Aluminum, Total			--- mg/L	--- mg/L
Zinc, Total			--- mg/L	--- mg/L
PCB 1016			--- mg/L	--- mg/L
PCB 1221			--- mg/L	--- mg/L
PCB 1232			--- mg/L	--- mg/L
PCB 1242			--- mg/L	--- mg/L
PCB 1248			--- mg/L	--- mg/L
PCB 1254			--- mg/L	--- mg/L
PCB 1260			--- mg/L	--- mg/L

--- Signifies a parameter which must be monitored, and data must be reported; no limit has been established at this time.

V. COMMENT PERIOD, HEARING REQUESTS, AND PROCEDURES OF FINAL DECISIONS

All persons, including applicants, who believe any condition of the draft permit is inappropriate must raise all issues and submit all available arguments and all supporting material for their arguments in full by the close of the public comment period, to the Rhode Island Department of Environmental Management, Office of Water Resources, 235 Promenade Street, Providence, Rhode Island, 02908-5767. Any person, prior to such date, may submit a request in writing for a public hearing to consider the draft permit to the Rhode Island Department of Environmental Management. Such requests shall state the nature of the issues proposed to be raised in the hearing. A public hearing may be held after at least thirty (30) days public notice whenever the Director finds that response to this notice indicates significant public interest. In reaching a final decision on the draft permit the Director will respond to all significant comments and make these responses available to the public at DEM's Providence Office.

Following the close of the comment period, and after a public hearing, if such hearing is held, the Director will issue a final permit decision and forward a copy of the final decision to the applicant and each person who has submitted written comments or requested notice. Within thirty (30) days following the notice of the final permit decision any interested person may submit a request for a formal hearing to reconsider or contest the final decision. Requests for formal hearings must satisfy the requirements of the RIPDES

Regulations (RI Code of Regulations: 250-RICR-150-10-1.50).

VI. DEM CONTACT

Additional information concerning the permit may be obtained between the hours of 8:30 a.m. and 4:00 p.m., Monday through Friday, excluding holidays, from:

Ekaterini Papazekos, E.I.T.
Environmental Engineer I
RIPDES Program

Department of Environmental Management
235 Promenade Street
Providence, Rhode Island 02908
Telephone: (401) 537-4036

10 December 2025
Date

Heidi Travers
Heidi Travers, PE
Environmental Engineer IV
RIPDES Program
Office of Water Resources
Department of Environmental Management

ATTACHMENTS

Attachment A: Average Effluent Characteristics by Outfall 2019-2024

Attachment B: Ambient Waterbody Hardness Data – Woonasquatucket River and Tributaries

Attachment C: Annual Average Benchmark Comparisons by Pollutant and by Outfall 2015-2024

Attachment D: Site Plan and Stormwater Management System Plan

Attachment A

Average Effluent Characteristics by Outfall 2019-2024

EFFLUENT CHARACTERISTICS: Outfall 001A (04/2015-12/2024)		
PARAMETER	AVERAGE DAILY MAX	GREATEST DAILY MAX
Flow	617836 MGD	1473393 MGD
Total Aluminum (as Al)	2.93 mg/L	0.598 mg/L
BOD, 5-day, 20°C	26.2 mg/L	148 mg/L
Total Copper (as Cu)	0.0112 mg/L	0.150 mg/L
Total Iron (as Fe)	0.235 mg/L	1.04 mg/L
Total Lead (as Pb)	0.00359 mg/L	0.0300 mg/L
Total Mercury (as Hg)	0.0000256 mg/L	0.000200 mg/L
Oil & Grease	0.769 mg/L	5.00 mg/L
PCB-1016	0.0000118 mg/L	0.000100 mg/L
PCB-1221	0.0000118 mg/L	0.000100 mg/L
PCB-1232	0.0000118 mg/L	0.000100 mg/L
PCB-1242	0.0000238 mg/L	0.000440 mg/L
PCB-1248	0.0000213 mg/L	0.000350 mg/L
PCB-1254	0.0000472 mg/L	0.000490 mg/L
PCB-1260	0.0000118 mg/L	0.000100 mg/L
Total Suspended Solids	5.23 mg/L	47.0 mg/L
Total Zinc (as Zn)	0.0419 mg/L	0.156 mg/L

EFFLUENT CHARACTERISTICS: pH (04/2015-12/2024)		
OUTFALL	MAXIMUM VALUE	MINIMUM VALUE
001A	8.78 S.U.	6.2 S.U.

Attachment B

Ambient Waterbody Hardness Data – Woonasquatucket River and Tributaries

Station	StationType	SampleDate	Parameter	Result	Unit	RiverID
WON03	Grab	6/1/2009 0:00	Hardness	39.454	mg/L	RI0002007R-10C
WON03	Grab	8/25/2009 0:00	Hardness	41.203	mg/L	RI0002007R-10C
WON03	Grab	6/25/2014 0:00	Hardness	51.7	mg/L	RI0002007R-10C
WON03	Grab	8/5/2014 0:00	Hardness	61.8	mg/L	RI0002007R-10C
WON03	Grab	9/9/2014 0:00	Hardness	36	mg/L	RI0002007R-10C
WON03	Grab	7/31/2019 0:00	Hardness	54.1	mg/L	RI0002007R-10C
WON03	Grab	9/25/2019 0:00	Hardness	45.7	mg/L	RI0002007R-10C
WON03	Grab	10/21/2019 0:00	Hardness	39	mg/L	RI0002007R-10C
WON03	Grab	6/20/2024	Hardness	36.7	mg/L	RI0002007R-10C
WON03	Grab	9/3/2024	Hardness	54.1	mg/L	RI0002007R-10C
WON03	Grab	9/19/2024	Hardness	59	mg/L	RI0002007R-10C
WON04	Grab	6/1/2009 0:00	Hardness	42.457	mg/L	RI0002007R-10C
WON04	Grab	8/25/2009 0:00	Hardness	40.899	mg/L	RI0002007R-10C
WON04	Grab	6/25/2014 0:00	Hardness	48.7	mg/L	RI0002007R-10C
WON04	Grab	8/5/2014 0:00	Hardness	54.6	mg/L	RI0002007R-10C
WON04	Grab	9/9/2014 0:00	Hardness	43.5	mg/L	RI0002007R-10C
WON04	Grab	7/31/2019 0:00	Hardness	50.1	mg/L	RI0002007R-10C
WON04	Grab	9/25/2019 0:00	Hardness	47.8	mg/L	RI0002007R-10C
WON04	Grab	10/21/2019 0:00	Hardness	37.9	mg/L	RI0002007R-10C
WON04	Grab	6/20/2024	Hardness	37.6	mg/L	RI0002007R-10C
WON04	Grab	9/4/2024	Hardness	50.4	mg/L	RI0002007R-10C
WON04	Grab	9/19/2024	Hardness	56.8	mg/L	RI0002007R-10C
WON08	Grab	6/2/2009 0:00	Hardness	41.898	mg/L	RI0002007R-10C
WON08	Grab	8/25/2009 0:00	Hardness	59.28	mg/L	RI0002007R-10C
WON09	Grab	6/1/2009 0:00	Hardness	41.717	mg/L	RI0002007R-10C
WON09	Grab	8/25/2009 0:00	Hardness	40.798	mg/L	RI0002007R-10C

average 46.66176923

benchmarks associated with 25 - 50 mg/L bucket based on average of
hardness values from 2009 to present

Attachment C

Annual Average Benchmark Comparisons by Pollutant and by Outfall 2015-2024

Outfall - Limit Set: 001-1-A				
Paramater (mg/L)				
Total Aluminum (as Al)		Total Aluminum (as Al)	Chemical Oxygen Demand	Chemical Oxygen Demand
Year	AVERAGE DAILY MAXIMUM	AVERAGE MONTHLY AVERAGE	AVERAGE DAILY MAXIMUM	AVERAGE MONTHLY AVERAGE
2015	37.06633333	0.103333333	56.33333333	56.33333333
2016	0.0865	0.0865	28.5	28.5
2017	0.19475	0.19475	10.25	16
2018	0.1045	0.1045	31.25	31.25
2019	0.19725	0.19725	54.75	54.75
2020	0.0805	0.0805	18.75	18.75
2021	0.032	0.032	11.5	11.5
2022	0.00675	0.00675	15.75	15.75
2023	0.047	0.047	26.5	26.5
2024	0.02575	0.046	13.25	11

Outfall - Limit Set: 001-1-A			
Paramater (mg/L)			
pH		pH	Oil & Grease
Year	MINIMUM	MAXIMUM	AVERAGE DAILY MAXIMUM
2015	7.32	7.316666667	0
2016	6.93	6.93	0
2017	6.8425	6.8425	0
2018	6.9675	6.9675	0
2019	6.91	6.91	0
2020	7.36	7.36	0
2021	7.85	7.85	0
2022	8.1425	8.1425	0
2023	7.715	7.715	0
2024	7.795	7.955	0

Outfall - Limit Set: 001-1-A				
Paramater (mg/L)				
Total Copper (as Cu)		Total Copper (as Cu)	Total Iron (as Fe)	Total Iron (as Fe)
	AVERAGE DAILY MAXIMUM	AVERAGE MONTHLY AVERAGE	AVERAGE DAILY MAXIMUM	AVERAGE MONTHLY AVERAGE
Year				
2015	0.012	0.012	0.237666667	0.237666667
2016	0.01	0.01	0.22675	0.22675
2017	0.04425	0.0105	0.15475	0.15475
2018	0.01625	0.01625	0.27375	0.27375
2019	0.00725	0.00725	0.641	0.641
2020	0.00325	0.00325	0.33575	0.33575
2021	0.00125	0.00125	0.13075	0.13075
2022	0.0005	0.0005	0.1085	0.1085
2023	0.005	0.005	0.155	0.155
2024	0.00475	0.005	0.08225	0.10875

Outfall - Limit Set: 001-1-A				
Paramater (mg/L)				
PCB-1248		PCB-1248	PCB-1254	PCB-1254
	AVERAGE DAILY MAXIMUM	AVERAGE MONTHLY AVERAGE	AVERAGE DAILY MAXIMUM	AVERAGE MONTHLY AVERAGE
Year				
2015	0	0	0	0
2016	0	0	0.0000975	0.0000975
2017	0.0000875	0.0000875	0.000195	0.000195
2018	0	0	0	0
2019	0	0	0.0000525	0.0000525
2020	0	0	0	0
2021	0	0	0	0
2022	0	0	0	0
2023	0	0	0	0
2024	0	0	0	0

Outfall - Limit Set: 001-1-A				
Paramater (mg/L)				
Total Lead (as Pb)		Total Lead (as Pb)	Total Mercury (as Hg)	Total Mercury (as Hg)
	AVERAGE DAILY MAXIMUM	AVERAGE MONTHLY AVERAGE	AVERAGE DAILY MAXIMUM	AVERAGE MONTHLY AVERAGE
Year				
2015	0	0	0	0
2016	0.009	0.009	0	0
2017	0.00925	0.00925	0	0
2018	0.00225	0.00225	0	0
2019	0.005	0.005	0	0
2020	0	0	0	0
2021	0	0	0	0
2022	0	0	0	0
2023	0.00075	0.00075	0	0
2024	0	0	0	0

Outfall - Limit Set: 001-1-A				
Paramater (mg/L)				
PCB-1260		PCB-1260	Total Suspended Solids	Total Suspended Solids
	AVERAGE DAILY MAXIMUM	AVERAGE MONTHLY AVERAGE	AVERAGE DAILY MAXIMUM	AVERAGE MONTHLY AVERAGE
Year				
2015	0	0	18.33333333	18.33333333
2016	0	0	0	0
2017	0	0	8.75	8.75
2018	0	0	0	0
2019	0	0	7.75	7.75
2020	0	0	6.75	6.75
2021	0	0	2.5	2.5
2022	0	0	0	0
2023	0	0	1.75	1.75
2024	0	0	4.75	3

Outfall - Limit Set: 001-1-A				
Paramater (mg/L)				
	PCB-1016	PCB-1016	PCB-1221	PCB-1221
	AVERAGE DAILY MAXIMUM	AVERAGE MONTHLY AVERAGE	AVERAGE DAILY MAXIMUM	AVERAGE MONTHLY AVERAGE
Year				
2015	0	0	0	0
2016	0	0	0	0
2017	0	0	0	0
2018	0	0	0	0
2019	0	0	0	0
2020	0	0	0	0
2021	0	0	0	0
2022	0	0	0	0
2023	0	0	0	0
2024	0	0	0	0

Outfall - Limit Set: 001-1-A		
Paramater (mg/L)		
	Total Zinc (as Zn)	Total Zinc (as Zn)
	AVERAGE DAILY MAXIMUM	AVERAGE MONTHLY AVERAGE
Year		
2015	0.016666667	0.016666667
2016	0.05025	0.05025
2017	0.0855	0.0855
2018	0.0505	0.0505
2019	0.05	0.05
2020	0.0285	0.0285
2021	0	0
2022	0.036	0.036
2023	0.04125	0.04125
2024	0.035	0.0355

Outfall - Limit Set: 001-1-A				
Paramater (mg/L)				
PCB-1232		PCB-1232	PCB-1242	PCB-1242
	AVERAGE DAILY MAXIMUM	AVERAGE MONTHLY AVERAGE	AVERAGE DAILY MAXIMUM	AVERAGE MONTHLY AVERAGE
Year				
2015	0	0	0	0
2016	0	0	0.00014	0.00014
2017	0	0	0	0
2018	0	0	0	0
2019	0	0	0	0
2020	0	0	0	0
2021	0	0	0	0
2022	0	0	0	0
2023	0	0	0	0
2024	0	0	0	0

Attachment D

Site Plan and Stormwater Management System Plan

AUTHORIZATION TO DISCHARGE UNDER THE
RHODE ISLAND POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of Chapter 46-12 of the Rhode Island General Laws, as amended, the

Fox Island LLC
50 Park Row West, Suite 113
Providence, RI 02903

is authorized to discharge from a facility located at the

Fox Island
North Kingstown, RI 02852

to receiving waters named

West Passage of Narragansett Bay

in accordance with effluent limitations, monitoring requirements and other conditions set forth herein.

This permit shall become effective on [REDACTED].

This permit and the authorization to discharge expire at midnight, five (5) years from the effective date.

This permit supersedes the permit issued on July 10, 2017.

This permit consists of 4 pages in Part I including effluent limitations, monitoring requirements, etc. and 8 pages in Part II including General Conditions.

Signed this _____ day of _____, 2026.

DRAFT

Jospeh B. Haberek, P.E., Administrator for Surface Water Protection
Office of Water Resources
Rhode Island Department of Environmental Management
Providence, Rhode Island

PART I

I.A. Effluent Limitations and Monitoring Requirements

I.A.1. During the period beginning on the effective date of this permit and lasting through permit expiration, the permittee is authorized to discharge from outfall serial number 001A (the brine discharge from the Newport 1000 Water Maker). Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations					Monitoring Requirement	
	Quantity – lbs./day		Concentration – Specify Units			Measurement Frequency	Sample Type
	Average Monthly	Maximum Daily	Average Monthly	Average Weekly	Maximum Daily		
Flow	6,240 GPD					1/Quarter	Recorder ¹

¹Flow shall be determined by taking an initial flow totalizer reading on the first day of the quarter and a final totalizer reading on the last day of the quarter, using the difference between these two readings as the total flow over the quarter, and dividing the total flow by the total number of calendar days during the quarter. This final value will be the average flow per day. The totalizer must be installed on the discharge line.

I.A.2 Reverse Osmosis (RO) Desalination System

- a. The permittee shall maintain a logbook to document RO system operation and maintenance activities in accordance with Part II(j) of the permit. The flow log shall include the volume of concentrated brine discharged in each calendar quarter in accordance with Footnote 1 in Part I.A.1 of the permit. In addition, during maintenance activities the flow log shall include the duration of the flow including the time(s) of day when flow commences and ceases. A summary of total flow and any operations and maintenance activities performed during the calendar year must be submitted with the Discharge Monitoring Reports required under Part I.B of the permit.
- b. The permittee shall implement the Standard Operating Procedures for the RO system annual winterization process and other maintenance activities as detailed in the March 2017 document entitled "Fox Island LLC Reverse Osmosis Desalinization System Standard Operating Procedures; RIPDES Permit No. RI0023736".

I.A.3

- a. The discharge shall not cause visible discoloration of the receiving waters.
- b. The effluent shall contain neither a visible oil sheen, foam, nor floating solids at any time.

I.A.4 All existing manufacturing, commercial, mining, and silvicultural dischargers must notify the Director as soon as they know or have reason to believe:

- a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
 - (1) One hundred micrograms per liter (100 ug/l);
 - (2) Two hundred micrograms per liter (200 ug/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 ug/l) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitro-phenol; and one milligram per liter (1 mg/l) for antimony;
 - (3) Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 C.F.R. s122.21(g)(7); or
 - (4) Any other notification level established by the Director in accordance with 40 C.F.R. s122.44(f) and Rhode Island Regulations.
- b. That any activity has occurred or will occur which would result in the discharge, on a non-routine or infrequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
 - (1) Five hundred micrograms per liter (500 ug/l);
 - (2) One milligram per liter (1 mg/l) for antimony;
 - (3) Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 C.F.R. s122.21(g)(7); or
 - (4) Any other notification level established by the Director in accordance with 40 C.F.R. s122.44(f) and Rhode Island Regulations.
- c. That they have begun or expect to begin to use or manufacture as an intermediate or final product or by-product any toxic pollutant which was not reported in the permit application.

I.A.5 The permittee is not authorized to use any chemical additive(s)/cleaner(s) in the operation of the desalination system. The permittee shall obtain Department approval prior to using any additive(s)/cleaner(s).

I.A.6 This permit serves as the State's Water Quality Certificate for the discharges described herein.

I.B. Monitoring and Reporting

I.B.1 Monitoring

All monitoring required by this permit shall be done in accordance with sampling and analytical testing procedures specified in Federal Regulations (40 CFR Part 136).

I.B.2 Submittal of DMRs Using NetDMR

The permittee shall continue to submit its annual monitoring data for each calendar year in discharge monitoring reports (DMRs) to DEM no later than January 15th of the following year electronically using NetDMR. When the permittee submits DMRs using NetDMR, it is not required to submit hard copies of DMRs to DEM.

I.B.3 Submittal of Reports as NetDMR Attachments

Unless otherwise specified in this permit, the permittee must submit electronic copies of documents in NetDMR that are directly related to the DMR. These include the following:

- a. DMR Cover Letters
- b. A summary of the total flow and any operations and maintenance activities performed during the calendar year per Part I.A.2.a of the permit

I.B.4 Submittal of Requests and Reports to DEM

The following requests, reports, and information described in this permit shall be submitted as hard copy to the DEM.

- a. Transfer of Permit Notice
- b. Request to use any chemical additive(s)/cleaner(s) in the operation of the desalination system
- c. Written notifications required under Part II
- d. Notice of unauthorized discharges

These reports, information, and requests shall be submitted to DEM by hard copy mail to the following address:

Rhode Island Department of Environmental Management
RIPDES Program
235 Promenade Street
Providence, Rhode Island 02908

I.B.5 Verbal Reports and Verbal Notifications

Any verbal reports or verbal notifications, if required in Parts I and/or II of this permit, shall be made to the DEM. This includes verbal reports and notifications which require reporting within 24 hours. (See Part II.(I)(5) General Requirements for 24-hour reporting) Verbal reports and verbal notifications shall be made to DEM at (401) 222-4700 or (401) 222-3070 at night.

PART II

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General Requirements

a) Duty to Comply

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of Chapter 46-12 of the Rhode Island General Laws and the Clean Water Act (CWA) and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

- (1) The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the CWA for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.
- (2) The CWA provides that any person who violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the CWA is subject to a civil penalty not to exceed \$10,000 per day of such violation. Any person who willfully or negligently violates permit conditions implementing Sections 301, 302, 306, 307 or 308 of the Act is subject to a fine of not less than \$2,500 nor more than \$25,000 per day of violation, or by imprisonment of not more than 1 year, or both.
- (3) Chapter 46-12 of the Rhode Island General Laws provides that any person who violates a permit condition is subject to a civil penalty of not more than \$5,000 per day of such violation. Any person who willfully or negligently violates a permit condition is subject to a criminal penalty of not more than \$10,000 per day of such violation and imprisonment for not more than 30 days, or both. Any person who knowingly makes any false statement in connection with the permit is subject to a criminal penalty of not more than \$5,000 for each instance of violation or by imprisonment for not more than 30 days, or both.

b) Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. The permittee shall submit a new application at least 180 days before the expiration date of the existing permit unless permission for a later date has been granted by the Director. (The Director shall not grant permission for applications to be submitted later than the expiration date of the existing permit.)

c) Need to Halt or Reduce Not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

d) Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

e) Proper Operation and Maintenance

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures, and, where applicable, compliance with DEM "Rules and Regulations Pertaining to the Operation and Maintenance of Wastewater Treatment Facilities" and "Rules and Regulations Pertaining to the Disposal and Utilization of Wastewater Treatment Facility Sludge." This provision requires the operation of back-up or auxiliary facilities or similar systems only when the operation is necessary to achieve compliance with the conditions of the permit.

f) Permit Actions

This permit may be modified, revoked and reissued, or terminated for cause, including but not limited to: (1) Violation of any terms or conditions of this permit; (2) Obtaining this permit by misrepresentation or failure to disclose all relevant facts; or (3) A change in any conditions that requires either a temporary or

permanent reduction or elimination of the authorized discharge. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

g) Property Rights

This permit does not convey any property rights of any sort, or any exclusive privilege.

h) Duty to Provide Information

The permittee shall furnish to the Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Director, upon request, copies of records required to be kept by this permit.

i) Inspection and Entry

The permittee shall allow the Director, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:

- (1) Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
- (2) Have access to and copy, at reasonable times any records that must be kept under the conditions of this permit;
- (3) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices or operations regulated or required under this permit; and
- (4) Sample or monitor any substances or parameters at any location, at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the CWA or Rhode Island law.

j) Monitoring and Records

- (1) Samples and measurements taken for the purpose of monitoring shall be representative of the volume and nature of the discharge over the sampling and reporting period.
- (2) The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings from continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 5 years from the date of the sample, measurement, report or application. This period may be extended by request of the Director at any time.
- (3) Records of monitoring information shall include:
 - (i) The date, exact place, and time of sampling or measurements;
 - (ii) The individual(s) who performed the sampling or measurements;
 - (iii) The date(s) analyses were performed;
 - (iv) The individual(s) who performed the analyses;
 - (v) The analytical techniques or methods used; and
 - (vi) The results of such analyses.
- (4) Monitoring must be conducted according to test procedures approved under 40 CFR Part 136 and applicable Rhode Island regulations, unless other test procedures have been specified in this permit.
- (5) The CWA provides that any person who falsifies, tampers with, or knowingly renders inaccurate, any monitoring device or method required to be maintained under this permit shall upon conviction, be punished by a fine of not more than \$10,000 per violation or by imprisonment for not more than 6 months per violation or by both. Chapter 46-12 of the Rhode Island General Laws also provides

that such acts are subject to a fine of not more than \$5,000 per violation, or by imprisonment for not more than 30 days per violation, or by both.

(6) Monitoring results must be reported on a Discharge Monitoring Report (DMR).

(7) If the permittee monitors any pollutant more frequently than required by the permit, using test procedures approved under 40 CFR Part 136, applicable State regulations, or as specified in the permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR.

k) Signatory Requirement

All applications, reports, or information submitted to the Director shall be signed and certified in accordance with 250-RICR-150-10-1.12 of the Rhode Island Pollutant Discharge Elimination System (RIPDES) Regulations. Rhode Island General Laws, Chapter 46-12 provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be punished by a fine of not more than \$5,000 per violation, or by imprisonment for not more than 30 days per violation, or by both.

l) Reporting Requirements

- (1) Planned changes. The permittee shall give notice to the Director as soon as possible of any planned physical alterations or additions to the permitted facility.
- (2) Anticipated noncompliance. The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with the permit requirements.
- (3) Transfers. This permit is not transferable to any person except after written notice to the Director. The Director may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under State and Federal law.
- (4) Monitoring reports. Monitoring results shall be reported at the intervals specified elsewhere in this permit.
- (5) Twenty-four-hour reporting. The permittee shall immediately report any noncompliance which may endanger health or the environment by calling DEM at (401) 222-4700 or (401) 222-3070 at night.

A written submission shall also be provided within five (5) days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

The following information must be reported immediately:

- (i) Any unanticipated bypass which causes a violation of any effluent limitation in the permit; or
- (ii) Any upset which causes a violation of any effluent limitation in the permit; or
- (iii) Any violation of a maximum daily discharge limitation for any of the pollutants specifically listed by the Director in the permit.

The Director may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.

(6) Other noncompliance. The permittee shall report all instances of noncompliance not reported under paragraphs (1), (2), and (5), of this section, at the time monitoring reports are submitted. The reports shall contain the information required in paragraph (l)(5) of the section.

- (7) Other information. Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Director, they shall promptly submit such facts or information.

m) Bypass

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

- (1) Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs (2) and (3) of this section.
- (2) Notice.
- (i) Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten (10) days before the date of the bypass.
- (ii) Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in 250-RICR-150-10-1.14(R) of the RIPDES Regulations.
- (3) Prohibition of bypass.
- (i) Bypass is prohibited, and the Director may take enforcement action against a permittee for bypass, unless:
- (A) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage, where "severe property damage" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production;
- (B) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
- (C) The permittee submitted notices as required under paragraph (2) of this section.
- (ii) The Director may approve an anticipated bypass, after considering its adverse effects, if the Director determines that it will meet the three conditions listed above in paragraph (3)(i) of this section.

n) Upset

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

- (1) Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of paragraph (2) of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.
- (2) Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

- (i) An upset occurred and that the permittee can identify the cause(s) of the upset;
- (ii) The permitted facility was at the time being properly operated;
- (iii) The permittee submitted notice of the upset as required in 250-RICR-150-10-1.14(R) of the RIPDES Regulations; and
- (iv) The permittee complied with any remedial measures required under 250-RICR-150-10-1.14(E) of the RIPDES Regulations.

(3) Burden of proof. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

o) Change in Discharge

All discharges authorized herein shall be consistent with the terms and conditions of this permit. Discharges which cause a violation of water quality standards are prohibited. The discharge of any pollutant identified in this permit more frequently than or at a level in excess of that authorized shall constitute a violation of the permit. Any anticipated facility expansions, production increases, or process modifications which will result in new, different or increased discharges of pollutants must be reported by submission of a new NPDES application at least 180 days prior to commencement of such discharges, or if such changes will not violate the effluent limitations specified in this permit, by notice, in writing, to the Director of such changes. Following such notice, the permit may be modified to specify and limit any pollutants not previously limited.

Until such modification is effective, any new or increased discharge in excess of permit limits or not specifically authorized by the permit constitutes a violation.

p) Removed Substances

Solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters shall be disposed of in a manner consistent with applicable Federal and State laws and regulations including, but not limited to the CWA and the Federal Resource Conservation and Recovery Act, 42 U.S.C. §§6901 et seq., Rhode Island General Laws, Chapters 46-12, 23-19.1 and regulations promulgated thereunder.

q) Power Failures

In order to maintain compliance with the effluent limitation and prohibitions of this permit, the permittee shall either:

In accordance with the Schedule of Compliance contained in Part I, provide an alternative power source sufficient to operate the wastewater control facilities;

or if such alternative power source is not in existence, and no date for its implementation appears in Part I, Halt reduce or otherwise control production and/or all discharges upon the reduction, loss, or failure of the primary source of power to the wastewater control facilities.

r) Availability of Reports

Except for data determined to be confidential under paragraph (w) below, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the DEM, 235 Promenade Street, Providence, Rhode Island 02908. As required by the CWA, effluent data shall not be considered confidential. Knowingly making any false statement on any such report may result in the imposition of criminal penalties as provided for in Section 309 of the CWA and under Section 46-12-14 of the Rhode Island General Laws.

s) State Laws

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State law.

t) Other Laws

The issuance of a permit does not authorize any injury to persons or property or invasion of other private rights, nor does it relieve the permittee of its obligation to comply with any other applicable Federal, State, and local laws and regulations.

u) Severability

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

v) Reopener Clause

The Director reserves the right to make appropriate revisions to this permit in order to incorporate any appropriate effluent limitations, schedules of compliance, or other provisions which may be authorized under the CWA or State law. In accordance with 250-RICR-150-10-1.16 and 250-RICR-150-10-1.24 of the RIPDES Regulations, if any effluent standard or prohibition, or water quality standard is promulgated under the CWA or under State law which is more stringent than any limitation on the pollutant in the permit, or controls a pollutant not limited in the permit, then the Director may promptly reopen the permit and modify or revoke and reissue the permit to conform to the applicable standard.

w) Confidentiality of Information

(1) Any information submitted to DEM pursuant to these regulations may be claimed as confidential by the submitter. Any such claim must be asserted at the time of submission in the manner prescribed on the application form or instructions or, in the case of other submissions, by stamping the words "confidential business information" on each page containing such information. If no claim is made at the time of submission, DEM may make the information available to the public without further notice.

(2) Claims of confidentiality for the following information will be denied:

- (i) The name and address of any permit applicant or permittee;
- (ii) Permit applications, permits and any attachments thereto; and
- (iii) NPDES effluent data.

x) Best Management Practices

The permittee shall adopt Best Management Practices (BMP) to control or abate the discharge of toxic pollutants and hazardous substances associated with or ancillary to the industrial manufacturing or treatment process and the Director may request the submission of a BMP plan where the Director determines that a permittee's practices may contribute significant amounts of such pollutants to waters of the State.

y) Right of Appeal

Within thirty (30) days of receipt of notice of a final permit decision, the permittee or any interested person may submit a request to the Director for an adjudicatory hearing to reconsider or contest that decision. The request for a hearing must conform to the requirements of 250-RICR-150-10-1.50 of the RIPDES Regulations.

Definitions

1. For purposes of this permit, those definitions contained in the RIPDES Regulations, and the Rhode Island Pretreatment Regulations shall apply.

2. The following abbreviations, when used, are defined below.

cu. M/day or M ³ /day	cubic meters per day
mg/L	milligrams per liter
µg/L	micrograms per liter
lbs/day	pounds per day
kg/day	kilograms per day
Temp. °C	temperature in degrees Centigrade
Temp. °F	temperature in degrees Fahrenheit
Turb.	turbidity measured by the Nephelometric Method (NTU)
TNFR or TSS	total nonfilterable residue or total suspended solids
DO	dissolved oxygen
BOD	five-day biochemical oxygen demand unless otherwise specified
TKN	total Kjeldahl nitrogen as nitrogen
Total N	total nitrogen
NH ₃ -N	ammonia nitrogen as nitrogen
Total P	total phosphorus
COD	chemical oxygen demand
TOC	total organic carbon
Surfactant	surface-active agent
pH	a measure of the hydrogen ion concentration
PCB	polychlorinated biphenyl
CFS	cubic feet per second
MGD	million gallons per day
Oil & Grease	Freon extractable material
Total Coliform	total coliform bacteria
Fecal Coliform	total fecal coliform bacteria
mL/L	milliliter(s) per liter
NO ₃ -N	nitrate nitrogen as nitrogen
NO ₂ -N	nitrite nitrogen as nitrogen
NO ₃ -NO ₂	combined nitrate and nitrite nitrogen as nitrogen
Cl ₂	total residual chlorine

RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
235 PROMENADE STREET
PROVIDENCE, RHODE ISLAND 02908-5767

STATEMENT OF BASIS

RHODE ISLAND POLLUTANT DISCHARGE ELIMINATION SYSTEM (RIPDES) PERMIT TO DISCHARGE
TO WATERS OF THE STATE

RIPDES PERMIT NUMBER:

RI0023736

NAME AND ADDRESS OF APPLICANT:

Fox Island LLC
50 Park Row West, Suite 113
Providence, RI 02903

NAME AND ADDRESS OF FACILITY WHERE DISCHARGE OCCURS:

Fox Island
North Kingstown, RI 02852

RECEIVING WATER:

West Passage of Narragansett Bay

WATERBODY ID NUMBER:

RI0007027E-03A

CLASSIFICATION:

SA

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I. PROPOSED ACTION, TYPE OF FACILITY, AND DISCHARGE LOCATION

The above-named applicant has applied to the Rhode Island Department of Environmental Management (DEM) for reissuance of a Rhode Island Pollutant Discharge Elimination System (RIPDES) Permit to discharge into the designated receiving water. The applicant's discharge consists of brine from a reverse osmosis desalination system, used to provide potable water to an individual residence and catering building.

The discharge to the West Passage of Narragansett Bay consists of brine that has been concentrated by the reverse osmosis desalination system. The discharge to the West Passage is through a 1-inch diameter PVC pipe fitted with a multi-port diffuser, which is located approximately 6 feet deep at mean low water. The latitude / longitude coordinates of the outfall are 41.554722, -71.418056.

II. DESCRIPTION OF DISCHARGE

A quantitative description of the discharge in terms of significant effluent parameters based on the facility's Discharge Monitoring Report (DMR) data from September 2017 through September 2025 is shown in Attachment 1.

III. PERMIT LIMITATIONS AND CONDITIONS

The effluent limitations of the permit, the monitoring requirements and any implementation schedule (if required) may be found in the draft permit.

IV. PERMIT BASIS AND EXPLANATION OF EFFLUENT LIMITATION DERIVATION

Facility Description

The applicant has installed a package desalination system at a residential home located on Fox Island with the sole purpose of providing potable water for the main residence and catering building to supplement water from the existing shallow fresh water well. The desalination unit is owned and operated by the applicant, who is also the homeowner, and is located at Fox Island off the coast of North Kingstown, Rhode Island. The discharge to the West Passage of Narragansett Bay consists of brine that has been concentrated by the reverse osmosis desalination system.

A line flow diagram is attached as Attachment 2.

The applicant's most recent RIPDES permit, authorizing discharges from the above-mentioned facility, was issued on July 10, 2017. The permit became effective on September 1, 2017 and expired on August 31, 2022. The facility submitted an application for permit reissuance to the DEM on October 29, 2021. On November 17, 2021, the DEM issued an application complete letter to the facility. In accordance with 250-RICR-150-10-1 §13 of the Regulations for the Rhode Island Pollutant Discharge Elimination System, the facility's September 1, 2017 permit remains in effect since the DEM has determined that a timely and complete permit application was submitted. Once this permit is reissued, it will supersede the September 1, 2017 permit.

Receiving Water Description

Outfall 001 discharges to the West Passage of Narragansett Bay in the segment defined as water body ID number RI0007027E-03A. This segment is described as West Passage waters south of a line extending from the shore in the vicinity of High Bank Ave, North Kingstown, running due east through buoy N"6" and terminating at the shoreline of Prudence Island; west of a line from the southernmost point on Prudence Island to the northernmost point on Jamestown, and north of a line from Cormorant Point at the mouth of Pettaquamscutt River, Narragansett to Beavertail, Jamestown, excluding all the West Passage, Allen's Harbor and Wickford Harbor waters. Warwick, East Greenwich, Portsmouth, North Kingstown, Jamestown, Narragansett. This segment is located in North Kingstown and is classified as a Class SA water body according to the Rhode Island Water Quality Regulations. Class SA waters are designated for shellfish

harvesting for direct human consumption, primary and secondary contact recreational activities, and fish and wildlife habitat. They shall be suitable for aquacultural uses, navigation, and industrial cooling. These waters shall have good aesthetic value. This segment is not listed as impaired on DEM's April 2024 Integrated Report. Impaired waters include those where TMDLs are required (i.e., Category 5 Waters or 303d List of Impaired Waters) and those where TMDLs are not required (i.e., Category 4 Waters).

Permit Limit Development

The requirements set forth in this permit are from the State's Water Quality Regulations (250-RICR-150-05-1) and the State's Regulations for the Rhode Island Pollutant Discharge Elimination System, both filed pursuant to RIGL Chapter 46-12, as amended. RIDEM's primary authority over the permit comes from EPA's delegation of the program in September 1984 under the Federal Clean Water Act (CWA).

Development of RIPDES permit limitations is a multi-step process consisting of the following steps: calculating allowable water quality-based discharge levels based on instream criteria, background data, and available dilution; assigning applicable technology-based limits and appropriate Best Professional Judgement (BPJ) based limits; determining if technology based limits apply; comparing existing and proposed limits; comparing discharge data to proposed limits; performing an antidegradation/antibacksliding analysis to determine the final permit limits; and evaluating the ability of the facility to meet the final permit effluent limits.

Water quality criteria are comprised of numeric and narrative criteria. Numeric criteria are scientifically derived ambient concentrations developed by EPA or the State for various pollutants of concern to protect human health and aquatic life. Narrative criteria are statements that describe the desired water quality goal. A water quality-based permit limit protects receiving water quality by ensuring that water quality standards are met.

A technology-based limit is a numeric limit, which is determined by examining the capability of a treatment process to reduce or eliminate pollutants.

Effluent monitoring requirements have been specified in accordance with RIPDES regulations as well as 40 CFR 122.41 (j), 122.44 (i), and 122.48 to yield data representative of the discharge.

Water Quality-Based Permit Limits

Mixing Zones and Dilution Factors

In order to evaluate the need for water quality-based limits, it is necessary to determine the mixing which occurs in the immediate vicinity of the discharge (initial dilution). It has been determined that mixing zones and corresponding dilution factors are acceptable for the proposed desalination system.

The size of the acute mixing zone was determined using the EPA's recommended criteria from the "Technical Support Document for Water Quality-based Toxics Control" (TSD). EPA's TSD indicates that the most stringent of the following criteria should be used:

- a) The Criteria Maximum Concentration (CMC) must be met within 10% of the distance from the edge of the outfall to the edge of the regulatory mixing zone. This is dependent upon the size of the regulatory (chronic) mixing zone. Since the EPA has not provided specific guidance regarding the sizing of chronic mixing zones, this criteria was not considered when evaluating the size of the acute mixing zone.
- b) The CMC must be met within a distance of fifty times (50x) the discharge length scale in any spatial direction. The discharge length scale equals the square root of the cross-sectional area of the discharge outlet. For a 1" diameter outfall pipe:

$$Radius = 50 * \sqrt{\left(\frac{\pi}{4}\right) \left(1'' * \frac{.3048m}{12''}\right)^2} = 1.13 \text{ meters}$$

This criteria yields an acute mixing zone radius of 1.13 meters.

- c) The CMC must be met within a distance of five times (5x) the local water depth in any horizontal direction. Using a local water depth of 9.84 feet (3 meters):

$$Radius = 5 * 9.84 \text{ ft} * \left(\frac{.3048m}{1 \text{ ft}}\right) = 15 \text{ meters}$$

This criteria gives an acute mixing zone radius of 15 meters.

The most stringent of the above criteria would be condition b, an acute mixing zone radius of 1.13 meters.

By using the CORMIX mixing zone model to model the dilution that would be achieved at a distance of 1.13 meters from the discharge, it was determined that a dilution of 6.5:1 would be realized. Due to the fact that the reverse osmosis unit operates on the principal of osmotic pressure to allow water to pass through the reverse osmosis membrane and will only concentrate any background “contaminants” (e.g., salts, minerals, and other ions, etc.) in the brine discharge, it does not add any new pollutants to the discharge. Therefore, to determine the resulting increase in instream pollutant concentrations that could be expected at the edge of the acute mixing zone, a mass balance calculation was used. Assuming a background concentration of 31.0 parts per thousand (ppt) and using a dilution factor of 6.5:1, it was determined that there would be a 2.06% increase in background concentration at the edge of the acute mixing zone.

Section 10(B)(7), of the Rhode Island Water Quality Regulations (250-RICR-150-05-1), identifies four minimum narrative criteria which must be met by all non-thermal mixing zones. At a minimum, when evaluating the size of chronic mixing zones, DEM policy has been to follow the thermal mixing zone requirement of a zone of safe passage greater than or equal to three-quarters (3/4) of the width of the river, stream or estuary. This would result in a mixing zone width of 750 meters, based on a total width of 3000 meters. However, criteria a, noted above, limits the chronic mixing zone to being 10x that of the acute mixing zone. Therefore, the DEM evaluated dilutions achieved within a chronic mixing zone limited to 10x the radius of the acute mixing zone or 11.3 meters.

By using the CORMIX mixing zone model to model the dilution that would be achieved at a distance of 11.3 meters from the discharge, it was determined that a dilution of 191.9:1 would be realized. Again, to determine the resulting increase in instream pollutant concentrations that could be expected at the edge of the chronic mixing zone, a mass balance calculation was used. Assuming a background concentration of 31.0 ppt and using a dilution factor of 191.9:1, it was determined that there would be a 0.08% increase in background concentration at the edge of the chronic mixing zone.

It should be noted that the calculated percent increase in background concentrations were conservative. The following elements of conservatism were built into the calculations: 1) It was assumed that the desalination unit would reject 100% of the background contaminants; 2) It was assumed that the desalination unit would have to produce 960 gallons per day, when in actuality average household water usage is estimated to be 300 gallons per day; and 3) Conservative settings (e.g., wind speed, receiving water velocity, etc.) were used in the CORMIX model. All of these conservative assumptions have the effect of limiting dilution and increasing the calculated percent increase in instream concentrations. Therefore, the calculated percent increases are considered to be “worst case” values. Attachment 3 includes the calculations used to determine the percent increase in background concentrations.

Wasteload Allocation

In accordance with 40 CFR Part 122.4(d)(1)(iii), it is only necessary to establish limitations for those pollutants in the discharge which have the reasonable potential to cause or contribute to the exceedance

of the in-stream criteria. As a result of the low calculated percent increases in background concentrations and the high degree of conservatism, it has been determined that water quality-based permit limits are not necessary for this discharge since it will not have the reasonable potential to cause an exceedance of the in-stream criteria.

Technology-Based Permit Limits

There are currently no technology-based limits for this discharge.

Antibacksliding and Antidegradation

Provided below is a brief introduction to Antibacksliding and Antidegradation, as well as a discussion on how the two policies were used to calculate water quality-based limits.

Antibacksliding

Antibacksliding restricts the level of relaxation of water quality-based limits from the previous permit. Section 303(d)(4) of the Clean Water Act addresses antibacksliding as the following:

1. Standards not attained – For receiving waters that have not attained the applicable water quality standards, limits based on a TMDL or WLA can only be revised if the water quality standards will be met. This may be done by (i) determining that the cumulative effect of all such revised limits would assure the attainment of such water quality standards; or (ii) removing the designated use which is not being attained in accordance with regulations under Section 303.
2. Standards attained – For receiving waters achieving or exceeding applicable water quality standards, limits can be relaxed if the revision is consistent with the State's Antidegradation Policy.

Therefore, in order to determine whether backsliding is permissible, the first question that must be asked is whether or not the receiving water is attaining the water quality standard. The Office has determined the most appropriate evaluation of existing water quality is by calculating pollutant levels, which would result after the consideration of all currently valid RIPDES permit limits or historic discharge data (whichever is greater), background data (when available), and any new information (i.e., dilution factors).

Antidegradation

The DEM's "Policy on the Implementation of the Antidegradation Provisions of the Rhode Island Water Quality Regulations July 2006" (the Policy) established four tiers of water quality protection:

Tier 1. In all surface waters, existing uses and the level of water quality necessary to protect the existing uses shall be maintained and protected.

Tier 2. In waters where the existing water quality criteria exceeds the levels necessary to support the propagation of fish and wildlife and recreation in and on the water, that quality shall be maintained and protected except for insignificant changes in water quality as determined by the Director and in accordance with the Antidegradation Implementation Policy, as amended. In addition, the Director may allow significant degradation, which is determined to be necessary to achieve important economic or social benefits to the State in accordance with the Antidegradation Policy.

Tier 2½. Where high quality waters constitute Special Resource Protection Waters SRPWs¹, there shall be no measurable degradation of the existing water quality necessary to protect the characteristics which cause the waterbody to be designated a SRPW. Notwithstanding that all public drinking water supplies are SRPWs, public drinking water suppliers may undertake temporary and short-term activities within the boundary perimeter of a public drinking water supply impoundment for essential maintenance or to address emergency

¹ SRPWs are surface waters identified by the Director as having significant recreational or ecological uses.

conditions in order to prevent adverse effect on public health or safety. These activities must comply with the requirements set forth in Tier 1 and Tier 2.

Tier 3. Where high quality waters constitute an Outstanding Natural Resource ONRWs², that water quality shall be maintained and protected. The State may allow some limited activities that result in temporary or short-term changes in the water quality of an ONRW. Such activities must not permanently degrade water quality or result in water quality lower than necessary to protect the existing uses in the ONRW.

In terms of the applicability of Tier 2 of the Policy, a water body is assessed as being high quality on a parameter-by-parameter basis. In accordance with Part II of the Policy, "Antidegradation applies to all new or increased projects or activities which may lower water quality or affect existing water uses, including but not limited to all 401 Water Quality Certification reviews and any new, reissued, or modified RIPDES permits." Part VI.A of the Policy indicates that it is not applicable to activities which result in insignificant (i.e., short-term minor) changes in water quality and that significant changes in water quality will only be allowed if it is necessary to accommodate important economic and social development in the area in which the receiving waters are located (important benefits demonstration). Part VI.B.4 of the Policy states that: "Theoretically, any new or increased discharge or activity could lower existing water quality and thus require the important benefits demonstration. However, DEM will: 1) evaluate applications on a case-by-case basis, using BPJ and all pertinent and available facts, including scientific and technical data and calculations as provided by the applicant; and 2) determine whether the incremental loss is significant enough to require the important benefits demonstration described below. [If not then as a general rule DEM will allocate no more than 20%.] Some of the considerations which will be made to determine if an impact is significant in each site specific decision are: 1) percent change in water quality parameter value and their temporal distribution; 2) quality and value of the resource; 3) cumulative impact of discharges and activities on water quality to date; 4) measurability of the change; 5) visibility of the change; 6) impact on fish and wildlife habitat; and 7) impact on potential and existing uses. As a general guide, any discharge or activity which consumes greater than 20% of the remaining assimilative capacity may be deemed significant and invoke full requirements to demonstrate important economic or social benefits."

Based on the analysis presented above, calculating the percent increase in background concentration as being much less than 20%, the DEM has determined that the quality of the receiving water shall be maintained and protected. Therefore, it has been determined that all permit limitations are consistent with the Rhode Island Antidegradation policy.

Other Conditions

The permittee shall maintain a logbook to document RO system operation and maintenance activities in accordance with Part II(j) of the General Conditions applicable to all RIPDES Permits. The flow log shall include the volume of concentrated brine discharged in each calendar quarter in accordance with Footnote 1 in Part I.A.1 of the permit. In addition, during maintenance activities the flow log shall include the duration of the flow including the time(s) of day when flow commences and ceases. A summary of total flow and any operations and maintenance activities performed during the calendar year must be submitted with the Discharge Monitoring Reports required under Part I.B of the permit.

The permittee shall implement the Standard Operating Procedures for the RO system annual winterization process and other maintenance activities as detailed in the March 2017 document entitled "Fox Island LLC Reverse Osmosis Desalinization System Standard Operating Procedures; RIPDES Permit No. RI0023736".

The permit prohibits the use of chemical additives (used for cleaning, preservation, or any other purposes) without prior written approval from the Department per Part I.A.5.

The remaining general and specific conditions of the permit are based on the RIPDES regulations as well as 40 CFR Parts 122 through 125 and consist primarily of management requirements common to all permits.

² ONRWs are a special subset of high-quality water bodies, identified by the State as having significant recreational or ecological water uses.

Permit Limit Summary

Presented in the following Table is a summary of the permit limitations and monitoring requirements for Outfall 001A set forth in the Final Permit.

Table 1 Permit Limits – Outfall 001A (the brine discharge from the Newport 1000 Water Maker)

Parameter	Monthly Average (Minimum)	Weekly Average	Daily Maximum (Maximum)	Measurement Frequency	Sampling Type
Flow	6,240 GPD			1/Quarter	Recorder

¹Flow shall be determined by taking an initial flow totalizer reading on the first day of the quarter and a final totalizer reading on the last day of the quarter, using the difference between these two readings as the total flow over the quarter, and dividing the total flow by the total number of calendar days during the quarter. This final value will be the average flow per day. The totalizer must be installed on the discharge line.

V. COMMENT PERIOD, HEARING REQUESTS, AND PROCEDURES FOR FINAL DECISIONS

All persons, including applicants, who believe any condition of the draft permit is inappropriate must raise all issues and submit all available arguments and all supporting material for their arguments in full by the close of the public comment period, to the Rhode Island Department of Environmental Management, Office of Water Resources, 235 Promenade Street, Providence, Rhode Island, 02908-5767. In accordance with Chapter 46-17.4 of Rhode Island General Laws, a public hearing will be held prior to the close of the public comment period. In reaching a final decision on the draft permit the Director will respond to all significant comments and make these responses available to the public at DEM's Providence office.

Following the close of the comment period, and after a public hearing, the Director will issue a final permit decision and forward a copy of the final decision to the applicant and each person who has submitted written comments, provided oral testimony, or requested notice. Within thirty (30) days following the notice of the final permit decision any interested person may submit a request for a formal hearing to reconsider or contest the final decision. Requests for formal hearings must satisfy the requirements of 250-RICR-150-10-1.50 of the Regulations for the Rhode Island Pollutant Discharge Elimination System.

VI. DEM CONTACT

Additional information concerning the permit may be obtained between the hours of 8:30 a.m. and 4:00 p.m., Monday through Friday, excluding holidays from:

Aaron Mello, Environmental Engineer II
Office of Water Resources / RIPDES Program
Department of Environmental Management
235 Promenade Street
Providence, Rhode Island 02908
Telephone: (401) 537-4255
Email: aaron.mello@dem.ri.gov

04 December 2025

Date

Heidi Travers

Heidi Travers, P.E.
Environmental Engineer IV
RIPDES Program
Office of Water Resources
Department of Environmental Management

Attachment 1

**Summary of Discharge Monitoring Report Data
September 2017 through September 2025**

FOX ISLAND, LLC

DMR Data Listing with Qualifier 10/28/25

*** NOT ICIS CERTIFIED***

001A

Monitoring Location = 1

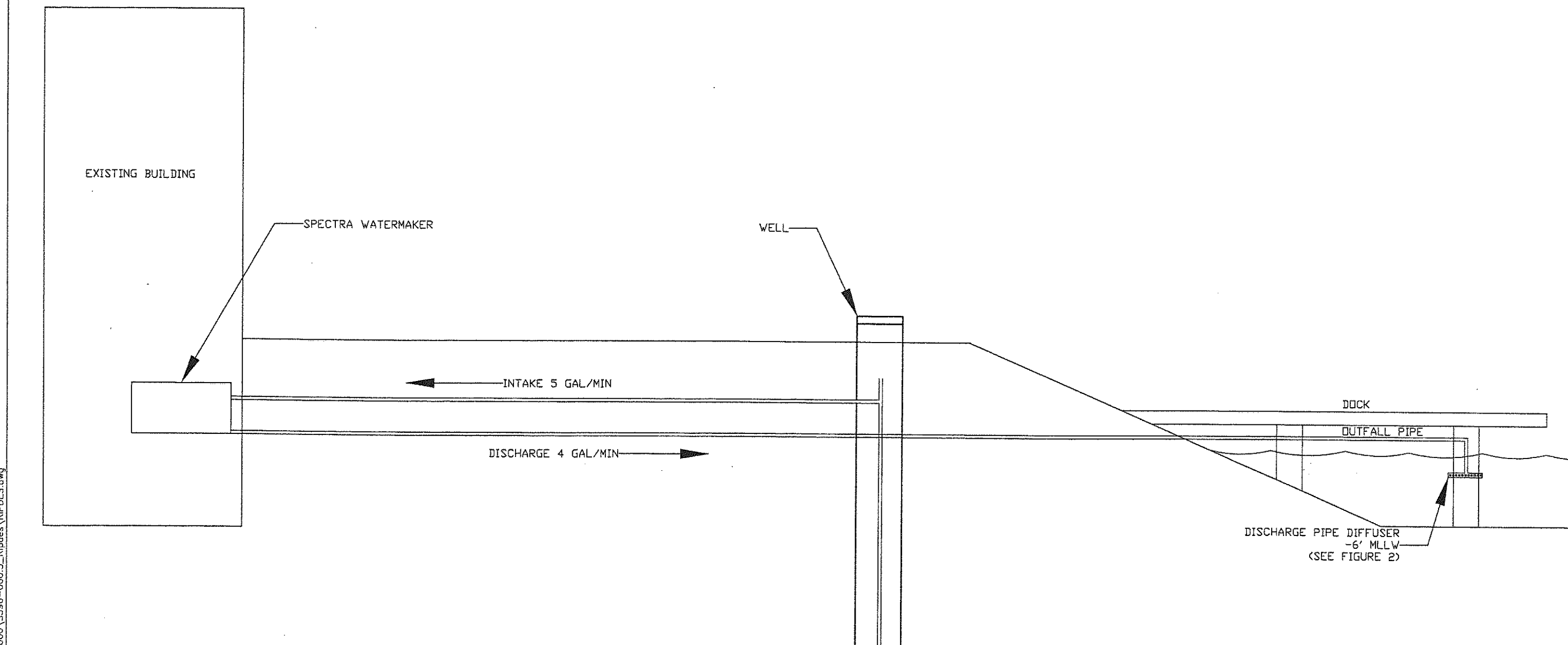
Flow, in conduit or thru treatment plant Location = 1

		MO AVG
50050	12/31/2017	=243.06 gal/d
50050	12/31/2018	NODI = C
50050	12/31/2019	NODI = C
50050	12/31/2020	NODI = C
50050	12/31/2021	NODI = C
50050	12/31/2022	NODI = C
50050	12/31/2023	NODI = C
50050	12/31/2024	NODI = C

Attachment 2

Desalinization System Line Flow Diagram

DATE: Mar 02, 2005 - 2:56PM
FILENAME: J:\S390-000\S390-000.3_Ripdes\RPDES.dwg



Engineers
Scientists
Consultants

FOX ISLAND DESALINIZATION SYSTEM
NORTH KINGSTOWN, RI

WATER FLOW LINE DRAWING

Figure
3

Attachment 3

Desalination Discharge Mass Balance Calculations

Fox Island LLC - Desalination Discharge

Mass Balance Calculations

Initial Condition Assumption:

Assume inlet concentration = 31000.00 ppm

From Application:

Intake Flow =	5	gpm	=	7200	gpd
Discharge Flow =	4.33	gpm	=	6235.2	gpd
Clean Water Used =	0.67	gpm	=	964.8	gpd

Assume 100% Rejection:

Discharge Concentration = 35796.77 ppm

Acute Mixing Zone**From EPA Technical Support Document:**

Acute Mixing Zone (AMZ) = 5 * Local Water Depth or 50 * Discharge Length Scale

Discharge Length Scale = $(3.174 * \text{Discharge Pipe's Radius}^2)^{.5}$

Local Water Depth = 9.843 feet = 3 meters

Discharge Pipe's Radius = 0.5 inches = 0.0126994 meters

AMZ = 15 meters or 1.13 meters

Most Stringent AMZ = 1.13 meters

From CORMIX Mixing Zone Model

At a AMZ of 1.13 meters, Dilution = 6.5 : 1

Instream Concentration at the Edge of the AMZ = 31639.569 ppm

Expected Increase in Concentration at Edge of AMZ

Background Concentration = 31000 ppm

AMZ Concentration = 31639.569 ppm

Percent Increase = 2.06 %

Chronic Mixing Zone**From EPA Technical Support Document:**

Chronic Mixing Zone (CMZ) = 1/4 * Estuary Width or 10 * Acute Mixing Zone

Local Water Width = 1.864205 miles = 3000 meters

Acute Mixing Zone = 1.13 meters

CMZ = 750 meters or 11.31 meters

Most Stringent CMZ = 11.3 meters

From CORMIX Mixing Zone Model

At a CMZ of 11.3 meters, Dilution = 191.9 : 1

Instream Concentration at the Edge of the CMZ = 31024.867 ppm

Expected Increase in Concentration at Edge of CMZ

Background Concentration = 31000.00 ppm

CMZ Concentration = 31024.867 ppm

Percent Increase = 0.08 %