

# **RHODE ISLAND**

## DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

**OFFICE OF WATER RESOURCES** 

235 Promenade Street, Providence, Rhode Island 02908

October 24, 2017

#### CERTIFIED MAIL

Joseph Reposa
Executive Director
Rhode Island Resource Recovery Corporation
65 Shun Pike
Johnston, RI 02919

RE:

Rhode Island Resource Recovery Corporation (RIRRC)
Final Permit Modification for RIPDES No. RI0023442

Dear Mr. Reposa,

Enclosed is your final Rhode Island Pollutant Discharge Elimination System (RIPDES) Permit Modification issued pursuant to Paragraph 10 of Consent Agreement RIA-422. State regulations, promulgated under Chapter 46-12 of the Rhode Island General Laws of 1956, as amended, require this Modification to become effective on the date specified on the first page of the Modification. No significant comments on the Modification were received; therefore, a response to comments was not prepared.

In an October 19, 2017 electronic correspondence RIRRC notified the DEM that the elevations for Pond 4 in Part I.C.1.c(2) of the draft permit modification should be modified to reflect as-built dimensions for the Bottom Elevation (370 ft), Lowest Invert Elevation (373.69 ft), and Sediment Removal Average Elevation (372.7 ft). Based on the above updated information and in accordance with Rule 25 of the "Regulations for the Rhode Island Pollutant Discharge Elimination System, February 2003" (RIPDES Regulations), the DEM has made a minor modification by revising the Part I.C.1.c(2) Pond 4 elevations. There were no changes made to the Statement of Basis.

Should RIRRC have any questions concerning this Modification, feel free to contact me at 401-222-4700, extension 7715.

eseph B. Haberek, P.E.

Supervising Sanitary Engineer

cc.

Brian Card, RIRRC (electronic)

Dan Szetela, RIRRC (electronic)

Inga Lermontov-Hoit, RIRRC (electronic)

Tricia Quest, DEM (electronic) Crystal Charbonneau, DEM (electronic)

#### **MODIFICATION**

# 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, RIPDES Permit No. RI0023442 issued to the Rhode Island Resource Recovery Corporation on April 24, 2015, shall be modified as follows:

Part I.C of the permit shall be deleted and replaced with the language in Part I.C found in *Attachment 1* of this modification.

Part I.A.1 and Part I.A.2 of the permit shall be modified to add Pond 4's discharge (outfall 004) and Pond 13's discharge (outfall 017) to the monitoring requirements from Part I.A.2 as found in Attachments 2 and 3 of this modification.

The remaining effluent limitations, monitoring requirements and other conditions in the original permit are unchanged and in effect.

This modification shall become effective on November 1, 2017.

This permit and the authorization to discharge expire at midnight, June 30, 2020.

This change modifies the permit issued on April 24, 2015.

This modification consists of six (6) pages.

Signed this 23<sup>rd</sup> day of October 2017.

Angelo S. Liberti, P.E., Chief of Surface Water Protection

Office of Water Resources

Rhode Island Department of Environmental Management

Providence, Rhode Island

#### ATTACHMENT 1

# C. INSPECTIONS AND MAINTENANCE

- 1. Inspections of the erosion control measures are to be conducted in a manner consistent with the Erosion and Sediment Control Plan. Results of all inspections must be documented and records retained on-site for a minimum period of five (5) years.
  - a. The following inspections must be conducted within 24 hours after all rainstorms which produce more than 1" of rainfall. During periods of continuous rain and/or melting, erosion control measures shall be inspected daily.
    - (1) Inspect newly seeded surfaces to ensure that seed and mulch remain in place and are not washed from the soil surface.
    - (2) Inspect any mulch cover to identify any damage to the cover, failure of anchoring mechanisms, washouts, dislocation or other failures. Inspections of the mulch cover are to continue until a permanent vegetative cover has been established.
    - (3) Inspect any straw/hay bale barriers to ensure that the integrity of the barriers have not been breached and to check sediment accumulation. Sediment must be removed from behind the barriers when its accumulation reaches 1/2 the height of the barriers.
    - (4) Inspect any filter fences to ensure that the integrity of the fence has not been breached and to check sediment accumulation. Sediment must be removed from behind the fences when its accumulation reaches 1/3 the height of the fences.
    - (5) Inspect any stone barriers to verify their integrity and to ensure that the center of the barriers remain a minimum of six (6) inches lower in elevation than the ends of the barriers. Sediment must be removed when accumulation interferes with the function of the barriers.
    - (6) Monitoring of sediment basin turbidity.

#### ATTACHMENT 1 CONTINUED

- b. The following inspections must be conducted on at least a quarterly basis:
  - (1) Visually inspect all diversion benches and drainage swales to ensure that the benches remain intact and to determine if settling has affected the grade of the bench. Annual site mapping will be used to verify the visual inspections. "Photogrammetric mapping" may be used to satisfy this requirement, when conducted. A copy of this mapping must be included with the semi-annual Comprehensive Site Evaluation Report that is due January 31st and July 31st of each year (see Part I.E).
  - (2) Inspect the basins that contain silt booms to ensure that the anchoring systems are securely fastened, flotation is adequate, and panel joints remain intact.
  - (3) Inspect riprap, for the first year after the placement of the riprap, to ensure that stone has not been dislodged and that scouring of the support material has not occurred. If the first year inspections verify the integrity of the riprap placement, inspection frequency can be reduced to annually.
- c. Sediment basin inspection and maintenance requirements
  - Sediment accumulation in sedimentation basins 5, 6 and 10 must be (1) measured at least once every 2 years and/or whenever there is a failure of sediment controls. Sediment levels for these ponds shall be measured during even numbered calendar years and submitted with the Comprehensive Site Evaluation Report due January 31st of odd numbered years. Sediment accumulation in sedimentation basins 2, 3. 4, 11 and 13 must be measured every year and/or whenever there is a failure of sediment controls. Sediment levels for these ponds for the previous calendar year shall be submitted with the Comprehensive Site Evaluation Reports due January 31st of each year. sedimentation basins 2, 3 and/or 11 no longer receive runoff from active areas of the landfill, then the permittee may request that sediment levels be measured once every 2 years and/or whenever there is a failure of sediment controls. Sediment measurement frequency shall remain once/year until OEM approves any frequency changes in writing.

# ATTACHMENT 1 CONTINUED

(2) Sediment must be removed when the sediment depth in the basin reaches 2/3 of the available storage depth; when the sediment level contacts the bottom of the boom in basins that contain sediment booms; or when the sediment depth in the basin is causing the basins to be ineffective in removing sediment.

Pond No.	Bottom Elevation (ft)	Lowest Invert Elevation (ft)	Sediment Removal Average Elevation (ft)
2	293.50	297.02	295.85
3	296.00	299.00	298.00
4	370.00	373.69	372.70
5	358.50	361.20	360.30
6	345.00	348.31	347.21
10	366.00	370.00	368.67
11	328.00	331.00	330.00
13	340.00	343.30	342.20

Note: Pond elevations for existing ponds must be verified after sediment removal.

- (3) Any ponds that have not been constructed must have their elevations verified within thirty (30) days after the completion of the pond's construction.
- 2. Sediment removal and erosion control maintenance must be performed in a manner consistent with the Erosion and Sedimentation Control Plan. Any sediment removal and/or maintenance performed must be documented and records retained on-site for a minimum period of five (5) years.

Permit No. RI0023442 Modification Page 5 of 6

### A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. During the period beginning on the effective date of this permit modification and lasting through the date of permit expiration, the permittee is authorized to discharge from outfall serial numbers: 005A (Pond 5 Outlet immediately below the spillway from the pond) and 006A (Pond 6 Outlet immediately below the spillway from the pond). Such discharges shall be limited and monitored by the permittee as specified below:

Effluent <u>Characteristic</u>	Discharge Limitations				Monitoring Requirement		
	Quantity - lbs./day		Concentration - specify units				
	Average <u>Monthly</u>	Maximum Daily	Average <u>Monthly</u>	Average <u>Weekly</u>	Maximum Daily	Measurement Frequency	Sample <u>Type</u>
Flow	GPD		mg/L		mg/L	See Footnote 1 See Footnote 1	Calculated <sup>2</sup> Grab <sup>3</sup>

<sup>3</sup>The 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. If it is not possible to collect the sample within the first thirty (30) minutes of a measureable storm event, the sample must be collected as soon as possible after the first thirty (30) minutes, and RIRRC shall submit a description of why a sample during the first thirty (30) minutes was impracticable.

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.

Samples must be obtained from a discharge which is the result of a representative storm event that occurs at least seventy-two (72) 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.

<sup>---</sup> signifies a parameter which must be monitored and data must be reported; no limit has been established at this time.

<sup>&</sup>lt;sup>1</sup>Samples shall be taken at a minimum frequency of monthly April – June and quarterly July – March.

<sup>&</sup>lt;sup>2</sup>Flow shall be calculated using the drainage area, runoff coefficient, and the amount of rainfall.

#### PART I

Permit No. RI0023442 Modification Page 6 of 6

#### A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

2. During the period beginning on the effective date of this permit modification and lasting through the date of permit expiration, the permittee is authorized to discharge from outfall serial numbers: 002A (Pond 2 Outlet immediately below the spillway from the pond and upstream of any influence of road runoff), 004A (Pond 4 Outlet immediately below the spillway from the pond), 015A (Pond 11 Outlet immediately below the spillway from the pond), 3015A (Pond 12 Outlet immediately below the spillway from the pond). Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations				Monitoring Requirement		
<u>Onaraotoriota</u>	Quantity -	<del></del>		tration - specify u	nits	Monitoring require	SILICITE
	Average	Maximum	Average	Average	Maximum	Measurement	Sample
	<u>Monthly</u>	<u>Daily</u>	Monthly *(Minimum)	Weekly *(Average)	<u>Daily</u> *(Maximum)	Frequency	<u>Type</u>
Flow	GPD		,	**************************************	,	See Footnote 1	Calculated <sup>2</sup>
BOD <sub>5</sub>			37 mg/L		140 mg/L	See Footnote 1	Grab <sup>3</sup>
TSS			27 mg/L		88 mg/L	See Footnote 1	Grab <sup>3</sup>
Ammonia, Total (as N)			4.9 mg/L		10 mg/L	See Footnote 1	Grab <sup>3</sup>
pH			(6.0 S.U.)		(9.0 S.U.)	See Footnote 1	Grab <sup>3</sup>
alpha-Terpineol			16 ug/L		33 ug/L	See Footnote 1	Grab <sup>3</sup>
Benzoic Acid			71 ug/L		120 ug/L	See Footnote 1	Grab <sup>3</sup>
p-Cresol			14 ug/L		25 ug/L	See Footnote 1	Grab <sup>3</sup>
Phenol			15 ug/L		26 ug/L	See Footnote 1	Grab <sup>3</sup>
Zinc, Total			110 ug/L		200 ug/L	See Footnote 1	Grab <sup>3</sup>
Iron, Total			mg/L		mg/L	See Footnote 1	Grab <sup>3</sup>

<sup>---</sup> signifies a parameter which must be monitored and data must be reported; no limit has been established at this time.

Samples must be obtained from a discharge which is the result of a representative storm event that occurs at least seventy-two (72) 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.

<sup>&</sup>quot;Values in parentheses ( ) are to be reported as Minimum/Maximum for the reporting period rather than Average Monthly/Maximum Daily.

<sup>&</sup>lt;sup>1</sup>Samples shall be taken at a minimum frequency of monthly April – June and quarterly July – March.

<sup>&</sup>lt;sup>2</sup>Flow shall be calculated using the drainage area, runoff coefficient, and the amount of rainfall.

<sup>&</sup>lt;sup>3</sup>The 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. If it is not possible to collect the sample within the first thirty (30) minutes of a measureable storm event, the sample must be collected as soon as possible after the first thirty (30) minutes, and RIRRC shall submit a description of why a sample during the first thirty (30) minutes was impracticable.

Permit No. RI0023442 Modification Statement of Basis Page 1 of 3

## **STATEMENT OF BASIS**

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

RIPDES PERMIT NO. RI0023442

NAME AND ADDRESS OF APPLICANT:

# RHODE ISLAND RESOURCE RECOVERY, CORPORATION 65 SHUN PIKE JOHNSTON, RI 02919

NAME AND ADDRESS OF FACILITY WHERE DISCHARGE OCCURS:

# RHODE ISLAND RESOURCE RECOVERY, CORPORATION 65 SHUN PIKE JOHNSTON, RI 02919

RECEIVING WATER:

# QUARRY STREAM and CEDAR SWAMP BROOK [RI0006018R-01] AND UPPER SIMMONS RESERVOIR [RI0006018L-03]

CLASSIFICATION: B

# I. Proposed Action

Erosion control measure inspection and maintenance language in Part I.C of the permit is being changed. The monitoring requirements for Ponds 4 and 13 were also modified.

### II. Permit Limitations and Conditions

This modification clarifies that inspections of erosion controls, required under Part I.C.l.a of the permit, be conducted within 24 hours of storms which produce a minimum of 1" of rain and eliminates the weekly minimum inspection frequency. Weekly inspection frequencies are not necessary since operations at the facility do not change that significantly to warrant weekly inspections during periods without precipitation. This modification also moves the sedimentation basin silt boom and rip-rap inspection frequency requirements from Part I.C.l.a (weekly) to Part I.C.l.b (quarterly). Quarterly inspections of the silt booms and rip-rap are adequate to ensure that these structural controls remain effective. For consistency purposes, sediment accumulation and removal requirements have all been consolidated under Part I.C.l.c of the permit. Finally, there were several other minor clarifications made to part I.C.1 of the permit.

Permit No. RI0023442 Modification Statement of Basis Page 2 of 3

This modification also updates the monitoring requirements for Ponds 4 and 13. Part I.A.6 of the permit requires that DEM be notified if there are changes in the status of any outfalls. On December 16, 2016 the permittee notified the DEM that pond 4 has been expanded and will start receiving runoff from the active areas of the Phase VI landfill in mid-2017. The permittee also notified the DEM that Pond 13 construction was completed and that it has started receiving runoff from the Phase VI landfill, although pond 13 will not begin discharging until 2018. Attachment A includes an updated flow diagram.

Since Pond 4 (outfall 004A) and Pond 13 (outfall 017A) will now receive storm water flows that are defined as Landfill Wastewater, according to 40 CFR Part 445, they are each subject to federal effluent guidelines that include technology based limits for Biochemical Oxygen Demand (BOD), Total Suspended Solids (TSS), Total Ammonia, alpha – Terpineol, Benzoic Acid, p-Cresol, Phenol, Zinc, and pH found at 40 CFR Part 445 Subpart B. This permit modification adds these permit limits to these outfalls. In addition, since these outfalls also receive contaminated storm water, which can have elevated levels of iron, the DEM has determined that it is appropriate to assign benchmark monitoring for Iron. Lastly, each of the ponds have been assigned monitoring for flow. Part I.C.1.c(2) of the permit has also been modified to include the updated elevations for these two ponds.

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 remain unchanged.

# III. Comment Period, Hearing Requests, and Procedures for Final Decisions

All persons, including applicants, who believe any condition of the draft permit modification 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 the 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 the 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 Rule 49 of the Regulations for the Rhode Island Pollutant Discharge Elimination System.

Permit No. RI0023442 Modification Statement of Basis Page 3 of 3

# IV. **DEM Contact**

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

Joseph Haberek, P.E.
Department of Environmental Management
Office of Water Resources
235 Promenade Street
Providence, Rhode Island, 02908-5767

Telephone: (401) 222-4700, ext: 7715

joseph.haberek@dem.ri.gov

Date

Fric A. Beck, P.E.

Supervising Sanitary Engineer
Office of Water Resources

Department of Environmental Management

# **ATTACHMENT A**

