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

Quonset Development Corporation
95 Cripe Street
North Kingstown, Rhode Island 02852

is authorized to discharge from a facility located at the

Quonset Wastewater Treatment Facility
150 Zarbo Ave.
North Kingstown, Rhode Island 02852

to receiving waters named

West Passage

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 issued on July 11, 2018.

This permit consists of 30 pages in Part I including effluent limitations, monitoring requirements, etc. and 8 pages in Part II including General Conditions.

Signed this _____ day of _____ , 2025.

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 either the date that outfall 001A is replaced with outfall 002A or through permit expiration, the permittee is authorized to discharge from outfall serial number 001A (final discharge from the WWTF after all treatment processes). Such discharges shall be monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations					Monitoring Requirement	
	Quantity – lbs./day		Concentration – Specify Units				
	Average Monthly	Maximum Daily	Average Monthly	Average Weekly	Maximum Daily	Measurement Frequency	Sample Type
Flow[1]	1.78 MGD	--- MGD				Continuous	Recorder
BOD_5[2]	445	742	30 mg/L	45 mg/L	50 mg/L	3/Week	24-Hr. Comp.
BOD_5 - % Removal[2]			85%			1/Month	Calculated
TSS[2]	445	742	30 mg/L	45 mg/L	50 mg/L	3/Week	24-Hr. Comp.
TSS - % Removal[2]			85%			1/Month	Calculated
Settleable Solids[1]				--- mL/L	--- mL/L	1/Day	Grab

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

[1] Sampling for Flow and Settleable Solids shall be performed Sunday-Saturday.

[2] Influent and effluent sampling is required for TSS and BOD_5. Sampling for TSS shall be performed Tuesday, Thursday, and either Saturday or Sunday. Two (2) of the BOD_5 samples shall be taken at the same time as two (2) of the TSS samples with appropriate allowances for hydraulic detention (flow-through) time.

PART I

I.A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

I.A.2. During the period beginning on the effective date of this permit and lasting through either the date that outfall 001A is replaced with outfall 002A or through permit expiration, the permittee is authorized to discharge from outfall serial number 001A (final discharge from the WWTF after all treatment processes). Such discharges shall be monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations					Monitoring Requirement	
	Quantity – lbs./day		Concentration – Specify Units				
	Average Monthly	Maximum Daily	Average Monthly *(Minimum)	Average Weekly	Maximum Daily *(Maximum)	Measurement Frequency	Sample Type
Enterococci			35 cfu/100 mL[1]		276 cfu/100 mL[1]	3/Week	Grab
Fecal Coliform			--- MPN/100 mL[1]		--- MPN/100 mL[1]	3/Week	Grab
Total Residual Chlorine (TRC)[3]			1.3 mg/L		1.3 mg/L	3/Day[2]	Grab[2]
pH			(6.0 SU)		(9.0 SU)	2/Day	Grab

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

* Values in parentheses () are to be reported as Minimum/Average/Maximum for the reporting period rather than Average Monthly/Maximum Daily.

[1] Two (2) of the three (3) Enterococci samples are to be taken on Tuesday and Thursday at the same time as one of the TRC samples. The Fecal Coliform samples shall be taken at the same time as the Enterococci samples. The Geometric Mean shall be used to obtain the and "monthly average." The facility shall report any fecal coliform sample result that exceeds 400 MPN/100 mL to DEM in accordance with the 24-hour reporting requirements under Part II(l)(5) of the permit.

[2] The use of a continuous TRC recorder after chlorination is required to provide a record that proper disinfection was achieved at all times. Compliance with these limitations shall be determined by taking three (3) grab samples per day, Monday - Friday (except holidays), equally spaced over one (1) eight (8) hour working shift with a minimum of three (3) hours between grabs. On Saturdays, Sundays and holidays, at least (2) grab samples shall be taken each day with a minimum of two (2) hours between grabs. The maximum daily and average monthly values are to be computed from the average grab sample results for each calendar day. The following methods may be used to analyze the grab samples: (1) DPD Spectrophotometric, EPA No. 330.5 or Standard Methods (18th Edition) No. 4500-Cl G; (2) DPD Titrimetric, EPA No. 330.4 or Standard Methods (18th Edition) No. 4500-Cl F; (3) Amperometric Titration, EPA No. 330.1 or Standard Methods (18th Edition) No. 4500-Cl D or ASTM No. D1253-86(92); (4) Iodometric direct titration, EPA No. 330.3 or Standard Methods (18th Edition) No. 4500-Cl B; or (5) Iodometric back titration (either end-point), EPA No. 330.2 or Standard Methods (18th Edition) No. 4500-Cl C.

[3] Sampling for pH and Chlorine Residual shall be performed Sunday-Saturday.

PART I

I.A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

I.A.3 During the period beginning on the effective date of this permit and lasting through either the date that outfall 001A is replaced with outfall 002A or through permit expiration, the permittee is authorized to discharge from outfall serial number 001A (final discharge from the WWTF after all treatment processes). Such discharges shall be monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations					Monitoring Requirement	
	Quantity – lbs./day		Concentration – Specify Units				
	Average Monthly	Maximum Daily	Average Monthly	Average Weekly	Maximum Daily	Measurement Frequency	Sample Type
Oil and Grease					--- mg/L	1/Month	Grab[1]
TKN (as N)							
(Nov. 1 – April 30)			--- mg/L		--- mg/L	1/Month	24-Hr. Comp.
(May 1 – October 31)			--- mg/L		--- mg/L	2/Month	24-Hr. Comp.
Nitrate, Total (as N)							
(Nov. 1 – April 30)			--- mg/L		--- mg/L	1/Month	24-Hr. Comp.
(May 1 – October 31)			--- mg/L		--- mg/L	2/Month	24-Hr. Comp.
Nitrite, Total (as N)							
(Nov. 1 – April 30)			--- mg/L		--- mg/L	1/Month	24-Hr. Comp.
(May 1 – October 31)			--- mg/L		--- mg/L	2/Month	24-Hr. Comp.
Nitrogen, Total (TKN + Nitrate + Nitrite, as N)							
(Nov. 1 – April 30)	--- lb/d		--- mg/L		--- mg/L	1/Month	Calculated
(May 1 – October 31)	--- lb/d		--- mg/L		--- mg/L	2/Month	Calculated

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

[1] Three (3) grab samples shall be equally spaced over the course of one (1) eight (8) hour shift with a minimum of three (3) hours between samples. Each of the three (3) grab samples must be analyzed individually and the maximum values reported.

Samples taken in compliance with the monitoring requirements specified above shall be taken Monday through Friday.

PART I

I.A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

I.A.4 During the period beginning on the effective date of this permit and lasting through either the date that outfall 001A is replaced with outfall 002A or through permit expiration, the permittee is authorized to discharge from outfall serial number 001A (final discharge from the WWTF after all treatment processes). Such discharges shall be monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations					Monitoring Requirement	
	Quantity – lbs./day		Concentration – Specify Units				
	Average Monthly	Maximum Daily	Average Monthly	Average Weekly	Maximum Daily	Measurement Frequency	Sample Type
Aldrin[1]			0.08 µg/L		104.00 µg/L	1/Quarter	Grab
Total Copper[2]			--- µg/L		--- µg/L	1/Quarter	24-Hr. Comp.
Cyanide[2,3]			--- µg/L		--- µg/L	1/Quarter	Composite
Phenols, Total[2]			--- µg/L		--- µg/L	1/Quarter	Grab
Total Cadmium[2]			--- µg/L		--- µg/L	1/Quarter	24-Hr. Comp.
Hexavalent Chromium[2]			--- µg/L		--- µg/L	1/Quarter	24-Hr. Comp.
Total Lead[2]			--- µg/L		--- µg/L	1/Quarter	24-Hr. Comp.
Total Zinc[2]			--- µg/L		--- µg/L	1/Quarter	24-Hr. Comp.
Total Nickel[2]			--- µg/L		--- µg/L	1/Quarter	24-Hr. Comp.
Total Aluminum[2]			--- µg/L		--- µg/L	1/Quarter	24-Hr. Comp.
Ammonia, Total (as N)[2]			--- mg/L		--- mg/L	1/Quarter	24-Hr. Comp.
Organic Carbon, Total[2]			--- mg/L		--- mg/L	1/Quarter	24-Hr. Comp.

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

[1] After four (4) consecutive quarters, if the pollutant is not detected in the discharge (i.e., non-detect using sufficiency sensitive detection limits) over four (4) consecutive quarters, after notifying the Department and receiving written approval from the Department, the permittee may discontinue monitoring."

[2] Monitoring data may be obtained in conjunction with the bioassay testing required in Part I.B. of the permit.

[3] Composite shall be conducted by taking three (3) grab samples per day, with a minimum of three (3) hours between grabs and preserved immediately upon collection. All three (3) samples shall be composited then analyzed for Available Cyanide. Once the permittee receives written notification by DEM that laboratories have been certified by Rhode Island Department of Health to analyze for Free Cyanide, permittee will be required to analyze for Free Cyanide in place of Available Cyanide.

Samples taken in compliance with the monitoring requirements specified above shall be taken Monday through Friday.

PART I

I.A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

I.A.5 During the period beginning on the effective date of this permit and lasting through either the date that outfall 001A is replaced with outfall 002A or through permit expiration, the permittee is authorized to discharge from outfall serial number 001A (final discharge from the WWTF after all treatment processes). Such discharges shall be monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations					Monitoring Requirement	
	Quantity – lbs./day		Concentration – Specify Units				
	Average Monthly	Maximum Daily	Average Monthly	Average Weekly	Maximum Daily	Measurement Frequency	Sample Type
Mysidopsis bahia[1] LC_{50}[2]					≥ 50%	1/Quarter	24-Hr. Comp.
Menidia spp LC_{50}[2]					≥ 50%	1/Quarter	24-Hr. Comp.

[1]Testing may be conducted using *Americamysis bahia*.

[2]LC_{50} is defined as the concentration of wastewater that causes mortality to 50% of the test organisms. Therefore, an LC_{50} limit of ≥ 50% means that a sample of 50% effluent shall cause no more than a 50% mortality rate.

Samples taken in compliance with the monitoring requirements in accordance with Part 1.B. of the permit.

PART I

I.A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

I.A.6 During the period beginning on the effective date of this permit and lasting through either the date that outfall 001A is replaced with outfall 002A or through permit expiration, the permittee is authorized to discharge from outfall serial number 001A (final discharge from the WWTF after all treatment processes). Such discharges shall be monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations					Monitoring Requirement	
	Quantity – lbs./day		Concentration – Specify Units				
	Average Monthly	Maximum Daily	Average Monthly	Average Weekly	Maximum Daily	Measurement Frequency	Sample Type
PFAS Analytes[1]					--- ng/L	1/Quarter	Grab [2]

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

[1]Influent and effluent sampling for the listed PFAS parameters listed in Attachment A. 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. Report in NetDMR the results of all PFAS analytes required to be tested as part of the method as shown in Attachment A.

[2]Influent samples taken in compliance with the monitoring requirements specified above shall be taken at the facility headworks at the same sampling location where influent BOD_5 and influent TSS are sampled. Effluent samples shall be taken after the chlorination contact tank.

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I.A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

I.A.7. During the period beginning on the date that discharge from Outfall 001A is eliminated and replaced with discharge from Outfall 002A and lasting through the permit expiration, the permittee is authorized to discharge from outfall serial number 002A (final discharge from the WWTF after all treatment processes). 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				
	Average Monthly	Maximum Daily	Average Monthly	Average Weekly	Maximum Daily	Measurement Frequency	Sample Type
Flow[1]	1.78 MGD	--- MGD				Continuous	Recorder
BOD_5[2]	445	742	30 mg/L	45 mg/L	50 mg/L	3/Week	24-Hr. Comp.
BOD_5 - % Removal[2]			85%			1/Month	Calculated
TSS[2]	445	742	30 mg/L	45 mg/L	50 mg/L	3/Week	24-Hr. Comp.
TSS - % Removal[2]			85%			1/Month	Calculated
Settleable Solids[1]				--- mL/L	--- mL/L	1/Day	Grab

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

[1] Sampling for Flow and Settleable Solids shall be performed Sunday-Saturday.

[2] Influent and effluent sampling is required for TSS and BOD_5. Sampling for TSS shall be performed Tuesday, Thursday, and either Saturday or Sunday. Two (2) of the BOD_5 samples shall be taken at the same time as two (2) of the TSS samples with appropriate allowances for hydraulic detention (flow-through) time.

PART I

I.A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

I.A.8. During the period beginning on the date that discharge from Outfall 001A is eliminated and replaced with discharge from Outfall 002A and lasting through the permit expiration, the permittee is authorized to discharge from outfall serial number 002A (final discharge from the WWTF after all treatment processes). 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				
	Average Monthly	Maximum Daily	Average Monthly *(Minimum)	Average Weekly	Maximum Daily *(Maximum)	Measurement Frequency	Sample Type
Enterococci			35 cfu/100 mL[1]		276 cfu/100 mL[1]	3/Week	Grab
Fecal Coliform			--- MPN/100 mL[1]		--- MPN/100 mL[1]	3/Week	Grab
Total Residual Chlorine (TRC)[3]			1.3 mg/L		1.3 mg/L	3/Day[2]	Grab[2]
pH			(6.0 SU)		(9.0 SU)	2/Day	Grab

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

* Values in parentheses () are to be reported as Minimum/Average/Maximum for the reporting period rather than Average Monthly/Maximum Daily.

[1] Two (2) of the three (3) Enterococci samples are to be taken on Tuesday and Thursday at the same time as one of the TRC samples. The Fecal Coliform samples shall be taken at the same time as the Enterococci samples. The Geometric Mean shall be used to obtain the and "monthly average." The facility shall report any fecal coliform sample result that exceeds 400 MPN/100 mL to DEM in accordance with the 24-hour reporting requirements under Part II(l)(5) of the permit.

[2] The use of a continuous TRC recorder after chlorination is required to provide a record that proper disinfection was achieved at all times. Compliance with these limitations shall be determined by taking three (3) grab samples per day, Monday - Friday (except holidays), equally spaced over one (1) eight (8) hour working shift with a minimum of three (3) hours between grabs. On Saturdays, Sundays and holidays, at least (2) grab samples shall be taken each day with a minimum of two (2) hours between grabs. The maximum daily and average monthly values are to be computed from the average grab sample results for each calendar day. The following methods may be used to analyze the grab samples: (1) DPD Spectrophotometric, EPA No. 330.5 or Standard Methods (18th Edition) No. 4500-Cl G; (2) DPD Titrimetric, EPA No. 330.4 or Standard Methods (18th Edition) No. 4500-Cl F; (3) Amperometric Titration, EPA No. 330.1 or Standard Methods (18th Edition) No. 4500-Cl D or ASTM No. D1253-86(92); (4) Iodometric direct titration, EPA No. 330.3 or Standard Methods (18th Edition) No. 4500-Cl B; or (5) Iodometric back titration (either end-point), EPA No. 330.2 or Standard Methods (18th Edition) No. 4500-Cl C.

[3] Sampling for pH and Chlorine Residual shall be performed Sunday-Saturday.

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I.A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

I.A.9 During the period beginning on the date that discharge from Outfall 001A is eliminated and replaced with discharge from Outfall 002A and lasting through the permit expiration, the permittee is authorized to discharge from outfall serial number 002A (final discharge from the WWTF after all treatment processes). 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				
	Average Monthly	Maximum Daily	Average Monthly	Average Weekly	Maximum Daily	Measurement Frequency	Sample Type
Oil and Grease					--- mg/L	1/Month	Grab[1]
TKN (as N)							
(Nov. 1 – April 30)			--- mg/L		--- mg/L	1/Month	24-Hr. Comp.
(May 1 – October 31)			--- mg/L		--- mg/L	2/Month	24-Hr. Comp.
Nitrate, Total (as N)							
(Nov. 1 – April 30)			--- mg/L		--- mg/L	1/Month	24-Hr. Comp.
(May 1 – October 31)			--- mg/L		--- mg/L	2/Month	24-Hr. Comp.
Nitrite, Total (as N)							
(Nov. 1 – April 30)			--- mg/L		--- mg/L	1/Month	24-Hr. Comp.
(May 1 – October 31)			--- mg/L		--- mg/L	2/Month	24-Hr. Comp.
Nitrogen, Total (TKN + Nitrate + Nitrite, as N)							
(Nov. 1 – April 30)	--- lb/d		--- mg/L		--- mg/L	1/Month	Calculated
(May 1 – October 31)	--- lb/d		--- mg/L		--- mg/L	2/Month	Calculated

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

[1] Three (3) grab samples shall be equally spaced over the course of one (1) eight (8) hour shift with a minimum of three (3) hours between samples. Each of the three (3) grab samples must be analyzed individually and the maximum values reported.

Samples taken in compliance with the monitoring requirements specified above shall be taken Monday through Friday.

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I.A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

I.A.10 During the period beginning on the date that discharge from Outfall 001A is eliminated and replaced with discharge from Outfall 002A and lasting through the permit expiration, the permittee is authorized to discharge from outfall serial number 002A (final discharge from the WWTF after all treatment processes). 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				
	Average Monthly	Maximum Daily	Average Monthly	Average Weekly	Maximum Daily	Measurement Frequency	Sample Type
Aldrin[1]			0.08 µg/L		104.00 µg/L	1/Quarter	Grab
Total Copper[2]			--- µg/L		--- µg/L	1/Quarter	24-Hr. Comp.
Cyanide[2,3]			--- µg/L		--- µg/L	1/Quarter	Composite
Phenols, Total[2]			--- µg/L		--- µg/L	1/Quarter	Grab
Total Cadmium[2]			--- µg/L		--- µg/L	1/Quarter	24-Hr. Comp.
Hexavalent Chromium[2]			--- µg/L		--- µg/L	1/Quarter	24-Hr. Comp.
Total Lead[2]			--- µg/L		--- µg/L	1/Quarter	24-Hr. Comp.
Total Zinc[2]			--- µg/L		--- µg/L	1/Quarter	24-Hr. Comp.
Total Nickel[2]			--- µg/L		--- µg/L	1/Quarter	24-Hr. Comp.
Total Aluminum[2]			--- µg/L		--- µg/L	1/Quarter	24-Hr. Comp.
Ammonia, Total (as N)[2]			--- mg/L		--- mg/L	1/Quarter	24-Hr. Comp.
Organic Carbon, Total[2]			--- mg/L		--- mg/L	1/Quarter	24-Hr. Comp.

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

[1] After four (4) consecutive quarters, if the pollutant is not detected in the discharge (i.e., non-detect using sufficiency sensitive detection limits) over four (4) consecutive quarters, after notifying the Department ***and*** receiving written approval from the Department, the permittee may discontinue monitoring

[2] Monitoring data may be obtained in conjunction with the bioassay testing required in Part I.B. of the permit.

[3] Composite shall be conducted by taking three (3) grab samples per day, with a minimum of three (3) hours between grabs and preserved immediately upon collection. All three (3) samples shall be composited then analyzed for Available Cyanide. Once the permittee receives written notification by DEM that laboratories have been certified by Rhode Island Department of Health to analyze for Free Cyanide, permittee will be required to analyze for Free Cyanide in place of Available Cyanide.

Samples taken in compliance with the monitoring requirements specified above shall be taken Monday through Friday.

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I.A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

I.A.11 During the period beginning on the date that discharge from Outfall 001A is eliminated and replaced with discharge from Outfall 002A and lasting through the permit expiration, the permittee is authorized to discharge from outfall serial number 002A (final discharge from the WWTF after all treatment processes). 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				
	Average Monthly	Maximum Daily	Average Monthly	Average Weekly	Maximum Daily	Measurement Frequency	Sample Type
Mysidopsis bahia[1] LC_{50}[2]					≥ 50%	1/Quarter	24-Hr. Comp.
Menidia spp LC_{50}[2]					≥ 50%	1/Quarter	24-Hr. Comp.

[1]Testing may be conducted using *Americamysis bahia*.

[2]LC_{50} is defined as the concentration of wastewater that causes mortality to 50% of the test organisms. Therefore, an LC_{50} limit of ≥ 50% means that a sample of 50% effluent shall cause no more than a 50% mortality rate.

Samples taken in compliance with the monitoring requirements in accordance with Part 1.B. of the permit.

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I.A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

I.A.12 During the period beginning on the date that discharge from Outfall 001A is eliminated and replaced with discharge from Outfall 002A and lasting through the permit expiration, the permittee is authorized to discharge from outfall serial number 002A (final discharge from the WWTF after all treatment processes). 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				
	Average Monthly	Maximum Daily	Average Monthly	Average Weekly	Maximum Daily	Measurement Frequency	Sample Type
PFAS Analytes[1]					--- ng/L	1/Quarter	Grab [2]

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

[1]Influent and effluent sampling for the listed PFAS parameters listed in Attachment A. 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. Report in NetDMR the results of all PFAS analytes required to be tested as part of the method as shown in Attachment A.

[2]Influent samples taken in compliance with the monitoring requirements specified above shall be taken at the facility headworks at the same sampling location where influent BOD_5 and influent TSS are sampled. Effluent samples shall be taken after the chlorination contact tank.

I.A.13 Per 40 CFR 122.42(b), prior to acceptance, the permittee shall notify DEM of the following:

a. Any new introduction of pollutants into the Permittee's treatment facility from an indirect discharger which would be subject to section 301 or 306 of CWA if it were directly discharging those pollutants; and

b. Any substantial change in the volume or character of pollutants being introduced into the Permittee's treatment facility by a source that was discharging pollutants into the facility at the time of permit issuance.

c. Notice shall include information on:
   (i) the quality and quantity of effluent introduced into the Permittee's treatment facility, and
   (ii) any anticipated impact of the change on the quantity and quality of effluent to be discharged from the Permittee's treatment facility.

I.A.14

a. The pH of the effluent shall not be less than 6.0 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.

d. The permittee's treatment facility shall maintain a minimum of 85 percent removal of both total suspended solids and 5-day biochemical oxygen demand. The percent removal shall be based on monthly average values.

e. When the effluent discharged for a period of ninety (90) consecutive days exceeds 80 percent of the designed flow, the permittee shall submit to the permitting authorities a projection of loadings up to the time when the design capacity of the treatment facility will be reached, and a program for maintaining satisfactory treatment levels consistent with approved water quality management plans.

f. The permittee shall analyze its effluent annually for the EPA Priority Pollutants as listed in 40 CFR 122, Appendix D, Table II and III. Such analysis shall be conducted during the third calendar quarter bioassay sampling event. The effluent sample shall be collected during the same twenty-four (24) hour period as the bioassay sample. The results of these analyses shall be submitted to the Department of Environmental Management by October 15th of each year. All sampling and analysis shall be done in accordance with EPA Regulations, including 40 CFR, Part 136; grab and composite samples shall be taken as appropriate.

g. At least thirty (30) calendar days prior to the date that discharge from Outfall 001 is eliminated and that effluent is discharged via Outfall 002, the permittee shall provide a written notification to DEM of the planned change in discharge location. No later than thirty (30) calendar days after the discharge from Outfall 001 is eliminated, the permittee shall provide written confirmation of the date that the discharge was eliminated along with a certification that the discharge no longer exists.

h. At least 60 (60) days prior to the start of discharge from Outfall 002, the permittee must submit a dilution study protocol, for DEM approval, outlining a dilution study of the new permitted discharge in the receiving water and including a proposed schedule to complete the study and submit a report to DEM. The date of the survey shall be coordinated with DEM to ensure that the survey is conducted during critical receiving water conditions. Critical conditions include periods of low freshwater flow to the West Passage of Narragansett Bay, lower wind speeds, and lower tidal activity (i.e., neap tides). A final report of the dilution study must be submitted to DEM in accordance with the approved schedule.

Upon acceptance of the dilution study results, DEM will evaluate the dilution characteristics applicable pollutant-specific criteria, and all effluent sampling results to determine if revised effluent limitations are deemed necessary. If the revised permit limitations are deemed necessary, the permit will be modified. The permit modification may include delineation of the mixing zone and/or changes to parameters monitored or monitoring frequencies.

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

I.B. BIOMONITORING REQUIREMENT AND INTERPRETATION OF RESULTS

I.B.1 General

Beginning on the effective date of the permit, the permittee shall perform eight (8) acute toxicity tests per year on samples collected from discharge outfall 001A prior to chlorination. The permittee shall conduct the tests during dry weather periods (no rain within forty-eight (48) hours prior to or during sampling unless approved by DEM) according to the following test frequency and protocols. Acute data shall be reported as outlined in Section I.B.10. The State may require additional screening, range finding, definitive acute or chronic bioassays as deemed necessary based on the results of the initial bioassays required herein. Indications of toxicity could result in requiring a Toxicity Reduction Evaluation (TRE) to investigate the causes and to identify corrective actions necessary to eliminate or reduce toxicity to an acceptable level.

I.B.2 Test Frequency

On four (4) sampling events, (one (1) each calendar quarter) the permittee will conduct forty-eight (48) hour acute definitive toxicity tests on the two (2) species listed below, for a total of eight (8) acute toxicity tests per year. This requirement entails performing two-species testing as follows:

Species	Test Type Two (2) Species Test Four (4) Times Annually	Frequency
Mysids (Mysidopsis bahia)	Definitive 48-Hour Acute Static (LC_{50})	Quarterly
Silversides (Menidia spp.)	Definitive 48-Hour Acute Static (LC_{50})	Quarterly

I.B.3 Test Methods

Acute definitive toxicity tests shall be conducted in accordance with protocols listed in 40 CFR Part 136.

I.B.4 Sample Collection

For each sampling event a twenty-four (24) hour flow-proportioned composited effluent sample shall be collected at a location just prior to chlorination during a dry weather (no rain forty-eight (48) hours prior to or during sampling unless approved by DEM). This sample shall be kept cool (at 4°C) and testing shall begin within twenty-four (24) hours after the last sample of the composite is collected. In the laboratory, the sample will be split into two (2) subsamples, after thorough mixing, for the following:

A: Chemical Analysis
B: Acute Toxicity Testing

All samples held overnight shall be refrigerated at 4°C. Grab samples must be used for pH and temperature.

I.B.5 Salinity Adjustment

Prior to the initiation of testing, the effluent must be adjusted to make the salinity of the effluent equal to that of the marine dilution water. The test solution must be prepared by adding non-toxic dried ocean salts to a sufficient quantity of 100% effluent to raise the salinity to the desired level. After the addition of the dried salts, stir gently for thirty (30) to sixty (60) minutes, preferably with a magnetic stirrer, to ensure that the salts are in solution. It is important to check the final salinity with a refractometer or salinometer. Salinity adjustments following this procedure and in accordance with EPA protocol will ensure that the concentrations (% effluent) of each dilution are real and allow for an accurate evaluation with the acute permit limits and acute monitoring requirements

I.B.6 Dilution Water

Dilution water used for marine acute toxicity analyses should be of sufficient quality to meet minimum acceptability of test results (See Sections I.B.7 and I.B.8). For both species, natural seawater shall be used as the dilution water. This water shall be collected from Narragansett Bay off the dock at the URI's Graduate School of Oceanography on South Ferry Road, Narragansett. It is noted that the University claims no responsibility for the personal safety on this dock. The permittee shall observe the rules posted at the dock. If this natural seawater diluent is found to be, or suspected to be toxic or unreliable, an alternate source of natural seawater or, deionized water mixed with hypersaline brine or artificial sea salts of known quality with a salinity and pH similar to that of the receiving water may be substituted AFTER RECEIVING WRITTEN APPROVAL FROM DEM.

I.B.7 Effluent Toxicity Test Conditions for Mysids (*Mysidopsis bahia*)

Test conditions are required to be compliant with 40 CFR 136 using the following effluent concentrations:

Five (5) dilutions plus a control: 100%, 50%, 25%, 12.5%, 6.25%, and 0% effluent

I.B.8 Effluent Toxicity Test Conditions for Silversides (*Menidia spp.*)

Test conditions are required to be compliant with 40 CFR 136 using the following effluent concentrations:

Five (5) dilutions plus a control: 100%, 50%, 25%, 12.5%, 6.25%, and 0% effluent.

I.B.9 Chemical Analysis

The following chemical analysis shall be performed for each sampling event. A sample analyzed as part of the required third-quarter priority pollutant scan may be used to satisfy this sampling requirement.

Parameter	Effluent	Saline Diluent	Detection Limit
pH	√	√	--
Specific Conductance	√	√	--
Total Solids and Suspended Solids	√	√	--
Total Ammonia	√		0.1 mg/L
Total Organic Carbon	√		0.5 mg/L
Cyanide[1]	√		0.01 mg/L
Total Phenols	√		0.05 mg/L
Salinity	√	√	PPT (0/00)
Total Cadmium[2]	√	√	0.1 µg/L
Hexavalent Chromium[3]	√	√	20.0 µg/L
Total Copper[2]	√	√	1.0 µg/L
Total Lead[2]	√	√	1.0 µg/L
Total Zinc[2]	√	√	5.0 µg/L
Total Nickel[2]	√	√	1.0 µg/L
Total Aluminum	√	√	5.0 µg/L

[1] Available Cyanide analysis is in addition to the Total Cyanide analysis that is required as part of the priority pollutant scan. Once the permittee receives written notification by DEM that laboratories have been certified by Rhode Island Department of Health to analyze for Free Cyanide, permittee will be required to analyzed for Free Cyanide in place of Available Cyanide.

[2] Priority pollutant.

[3] Hexavalent chromium analysis is in addition to the total chromium analysis that is required as part of the priority pollutant scan.

The above analysis may be used to fulfill, in part or in whole, monitoring requirements in the permit for these specific metals.

During the third calendar quarter bioassay sampling event, the final effluent sample collected during the same twenty-four (24) hour period as the bioassay sample, shall be analyzed for priority pollutants (as listed

in Tables II and III of Appendix D of 40 CFR 122). The bioassay priority pollutant scan shall be a full scan and may be coordinated with other permit conditions to fulfill any other pollutant scan requirements.

I.B.10 Toxicity Test Report Elements

A report of results will include the following:

- Description of sample collection procedures and site description.
- Names of individuals collecting and transporting samples, times, and dates of sample collection and analysis.
- General description of tests: age of test organisms, origin, dates and results of standard toxicant tests (quality assurance); light and temperature regime; dilution water description; other information on test conditions if different than procedures recommended.
- The method used to adjust the salinity of the effluent must be reported.
- All chemical and physical data generated (include detection limits).
- Raw data and bench sheets.
- Any other observations or test conditions affecting test outcome.

Toxicity test data shall include the following:

- Survival for each concentration and replication at time twenty-four (24) and forty-eight (48) hours.
- LC_{50} and 95% confidence limits shall be calculated using one of the following methods in order of preference: Probit, Trimmed Spearman Karber, Moving Average Angle, or the graphical method. All printouts (along with the name of the program, the date, and the author(s)) and graphical displays must be submitted. When data is analyzed by hand, worksheets should be submitted. The report shall also include the No Observed Acute Effect Level (NOAEL) which is defined as the highest concentration of the effluent (in % effluent) in which 90% or more of the test animals survive.
- The Probit, Trimmed Spearman Karber, and Moving Average Angle methods of analyses can only be used when mortality of some of the test organisms are observed in at least two (2) of the (percent effluent) concentrations tested (i.e., partial mortality). If a test results in a 100% survival and 100% mortality in adjacent treatments ("all or nothing" effect), an LC_{50} may be estimated using the graphical method.

I.B.11 Special Condition

Since the suggested dilution water for this facility to use in conducting the bioassays is from the end of the dock at the URI's Narragansett Bay Campus, a Letter of Agreement shall be signed and submitted to the Graduate School of Oceanography granting authorization to collect samples. Requests to use another source of dilution water will have to be approved by the Department of Environmental Management, Office of Water Resources.

I.B.12 Species Sensitivity Screening Report

For four (4) quarters of the permit beginning the third year of the permit ( ), the permittee shall conduct a chronic species sensitivity screening for the discharge. Species sensitivity screening for chronic toxicity shall include, at minimum, chronic toxicity testing for four consecutive calendar quarters using 40 CFR Part 136 approved methods for mysid (*Mysidopsis bahia*), sea urchin (*Arbacia punctulate*), and fish (*Menidia beryllina*). Samples shall be obtained from the dechlorinated effluent collected from Outfall 001A during dry weather periods (no rain within forty-eight (48) hours prior to or during sampling unless approved by DEM).

The above analysis may fulfill the quarterly acute monitoring requirements in Part I.A.5 provided that all tests are conducted in accordance with protocols listed in 40 CFR Part 136.

If only a single species in the species sensitivity screening testing exceeds 1 chronic Toxic Unit (TUc) (as 100/NOEC), then that species shall be established as the most sensitive species. If there are more than one species that exceed 1 TUc (as 100/NOEC), then the species with the highest TUc (as 100/NOEC) shall be established as the most sensitive species. DEM shall have final discretion to determine which species is the most sensitive considering the test results from the species sensitivity screening.

Test No.	Quarter Screening is to be Performed
1	( )
2	( )
3	( )
4	( )

The final Species Sensitivity Screening Report shall include all the elements required under Part I.B.9 for each quarterly test and shall be submitted to DEM by ( ).

I.B.13 Reporting of Bioassay Testing

Bioassay Testing shall be reported as follows:

Quarter Testing to be Performed	Report Due No Later Than	Results Submitted on DMR for
January 1 – March 31	April 15	March
April 1 – June 30	July 15	June
July 1 – September 30	October 15	September
October 1 – December 31	January 15	December

Reports shall be maintained by the permittee and shall be made available upon request by DEM.

I.C. Industrial Pretreatment Program

I.C.1 Definitions

For the purpose of this permit, the following definitions apply.

a. 40 CFR 403 and sections thereof refer to the General Pretreatment regulations, 40 CFR Part 403 as revised.

b. Categorical Pretreatment Standards mean any regulation containing pollutant discharge limits promulgated by the USEPA in accordance with section 307(b) and (c) of the Clean Water Act (33 USC 1251), as amended, which apply to a specific category of industrial users and which appears in 40 CFR Chapter 1, subchapter N.

c. Pretreatment Standards include all specific prohibitions and prohibitive discharge limits established pursuant to 40 CFR 403.5, including but not limited to, local limits, and the Categorical Pretreatment Standards.

d. Regulated Pollutants shall include those pollutants contained in applicable categorical standards and any other pollutants listed in the Pretreatment Standards which have reasonable potential to be present in an industrial user's effluent.

I.C.2 Implementation

The authority and procedures of the Industrial Pretreatment Program shall at all times be fully and effectively exercised and implemented, in compliance with the requirements of this permit and in accordance with the legal authorities, policies, procedures and financial provisions described in the permittee's approved Pretreatment Program and Sewer Use Ordinance, the Rhode Island Pretreatment Regulations and the

General Pretreatment Regulations 40 CFR 403. The permittee shall maintain adequate resource levels to accomplish the objectives of the Pretreatment Program.

I.C.3 Local Limits Monitoring Plan

The permittee shall submit a Local Limits Monitoring Plan (LLMP) that is current with EPA's Local Limits Development Guidance (LLDG, EPA 833-R-04-002A, July 2004) and EPA Region 1 policy. A LLMP defines pollutants of concern (POC), sampling locations and sampling frequencies. The permittee shall submit LLMP amendments within one hundred twenty (120) days of the permit effective date. The LLMP shall be subject to DEM review and approval. Changes made to the LLMP shall be in accordance with part I.C.6.f and shall meet the following minimum requirements

a. Identify all sampling locations, including but not limited to: POTW influent, POTW effluent, POTW sludge, septage and hauled wastes, and domestic wastewater (i.e., key manhole sampling). Domestic sampling location(s) must be strictly domestic and separate from any potential commercial or industrial sources or contributions.

b. Pollutants of concern (POC) that will be sampled for at each sampling location. At minimum, the following pollutants should be sampled for: arsenic, cadmium, chromium, copper, cyanide, lead, mercury, nickel, silver, zinc, molybdenum, selenium, BOD, TSS, and ammonia. In addition, the IPP must identify as POCs any pollutants for which there are RIPDES permit effluent limitations or any other POCs that the IPP has identified. If any of the listed POCs would not be sampled for at a particular location, this must be justified by the LLMP.

c. Sampling type for each pollutant (grab, composite, time-proportioned, flow-proportioned). All sampling and reporting requirements shall be in accordance with 40 CFR 136.

d. Identification of analytical methods being used, which would include minimum detection levels (MDL) and minimum quantitative levels (MQL) for the analysis of each pollutant.

e. The sampling frequency at each sampling location. For pollutants that have an associated local limit, sampling must take place quarterly at a minimum. For POCs without a local limit, sampling must take place annually at a minimum. Other organic priority pollutants must be sampled at the influent at a minimum of annually. TCLP results must be taken for POTW sludge a minimum of annually.

f. The sampling plan must account for POTW detention time. For example, if the detention time through the facility is 24 hours, then effluent samples should be collected 24 hours after influent samples.

g. Identification of data to be recorded for each sample (date, time, initials of sampler, preservation, location, sample type, wastewater flow, etc.).

Deviations from the above requirements may be approved at the DEM's discretion based on reasonable technical justifications.

I.C.4 Local Limits

Pollutants introduced into POTWs by a non-domestic source (user) shall not: pass through the POTW, interfere with the operation or performance of the works, contaminate sludge as to adversely affect disposal options, or adversely affect worker safety and health.

a. Within one hundred twenty (120) days of the effective date of this permit and in accordance with 40 CFR 122.44(j)(2)(ii), the permittee shall submit to DEM a technically-based local limits evaluation. The evaluation must address whether the permittee will need to revise its current local limits in order to meet the discharge requirements contained in this permit, meet the permittee's current sludge disposal option criteria, protect against WWTF interference, and ensure protection of WWTF worker health and safety. If revision is required, the evaluation

shall contain proposed numerical limitations developed by the permittee in accordance with the procedures set forth in the EPA's July 2004 Local Limits Guidance Manual. All supporting data and calculations must be submitted with the evaluation. In preparing this evaluation, the Permittee may complete and submit the attached form (see Attachment B – Reassessment of Technically Based Industrial Discharge Limits) with the technical evaluation to assist in determining whether existing local limits need to be revised. Upon review, DEM will provide written notification either granting preliminary approval of the local limits evaluation or stating the deficiencies revealed therein. Should DEM determine that a deficiency exists in the local limits evaluation submittal, the permittee shall submit to the DEM, within thirty (30) days of the receipt of said notice (unless a longer timeframe is specified therein), a revised evaluation consistent with the DEM's notice of deficiency.

b. Should the evaluation determine the need to revise local limits, within sixty (60) days (unless a longer timeframe is granted) of the receipt of preliminary approval of the proposed limits, the permittee shall submit to the DEM a request for a pretreatment program modification in accordance with 40 CFR 403.18 and Part I.C.6.f of this permit. Upon final approval by the DEM and adoption by the permittee, these limits shall be deemed Pretreatment Standards for the purposes of Section 307(d) of the Clean Water Act. No longer than thirty (30) days (unless a longer timeframe is granted) following the DEM's final approval of the proposed local limits, the permittee shall commence implementation of the revised local limits and reissue or modify all applicable industrial user permits to contain the modified local limits.

I.C.5 Enforcement Response Plan (ERP)

The permittee has an approved ERP dated July 25, 2018 that meets the requirements of 40 CFR 403.8(f)(5). The permittee shall continue to implement its approved ERP at all times.

I.C.6 General

a. The permittee shall carry out inspection, surveillance, and monitoring procedures which will determine, independent of information supplied by the industrial user, whether the industrial user is in compliance with Pretreatment Standards. At a minimum, all significant industrial users shall be inspected and monitored for all regulated pollutants at the frequency established in the approved Industrial Pretreatment Program but in no case less than once per year (one (1) year being determined as the reporting year established in Part I.C.7 of this permit). In addition, these inspections, monitoring and surveillance activities must be conducted in accordance with EPA's Industrial User Inspection and Sampling Manual for POTW's, April 1994. All inspections, monitoring, and surveillance activities shall be performed, and have records maintained, with sufficient care to produce evidence admissible in enforcement proceedings or judicial actions. The permittee shall evaluate, at least every two years unless specific superseding 40 CFR 403 streamlining provisions have been adopted, whether each SIU requires a Slug Control Plan. If a Slug Control Plan is required, it shall include the contents specified by 40 CFR 403.8(f)(2)(vi).

b. The permittee shall reissue all necessary Industrial User (IU) control mechanisms within thirty (30) days of their expiration date. The permittee shall issue, within sixty (60) days after the determination that an IU is a Significant Industrial User (SIU), all SIU control mechanisms. All SIU control mechanisms must contain, at a minimum, those conditions stated in 40 CFR 403.8(f)(1)(iii)(B). All control mechanisms must be mailed via Certified Mail, Return Receipt Requested. A complete bound copy of the control mechanism with the appropriate receipt must be kept as part of the Industrial User's permanent file. In addition, the permittee must develop a fact sheet describing the basis for the SIU's permit and retain this fact sheet as part of the SIU's permanent file.

c. The permittee must identify each instance of noncompliance with any pretreatment standard and/or requirement and take a formal documented action for each instance of noncompliance. Copies of all such documentation must be maintained in the Industrial User's permanent file.

d. The permittee shall prohibit Industrial Users from the dilution of a discharge as a substitute for adequate treatment in accordance with 40 CFR 403.6(d).

e. The permittee shall prohibit Industrial Users from introducing into the POTW:

   i. any pollutant which causes pass-through or interference as defined in 40 CFR 403.3.

   ii. pollutants which create a fire or explosion hazard in the POTW, including, but not limited to, wastestreams with a closed cup flashpoint of less than 140 degrees Fahrenheit or 60 degrees Centigrade using the test methods specified in 40 CFR 261.21;

   iii. Pollutants which will cause corrosive structural damage to the POTW, but in no case Discharges with pH lower than 5.0, unless the works is specifically designed to accommodate such Discharges;

   iv. Solid or viscous pollutants in amounts which will cause obstruction to the flow in the POTW resulting in interference;

   v. Any pollutants, including oxygen demanding pollutants (BOD, etc.) released in a Discharge at a flowrate and/or pollutant concentration which will cause Interference with the POTW.

   vi. Heat in amounts which will inhibit biological activity in the POTW resulting in Interference, but in no case heat in such quantities that the temperature at the POTW Treatment Plant exceeds 40°C (104°F) unless the Approval Authority, upon request of the POTW, approves alternative temperature limits.

   vii. Petroleum oil, nonbiodegradable cutting oil, or products of mineral oil origin in amounts that will cause interference or pass through;

   viii. Pollutants which result in the presence of toxic gases, vapors, or fumes within the POTW in a quantity that may cause acute worker health and safety problems;

   ix. Any trucked or hauled pollutants, except at discharge points designated by the POTW.

f. The permittee shall comply with the procedures of 40 CFR 403.18 for instituting any modifications of the permittee's approved Pretreatment Program. Significant changes in the operation of a POTW's approved Pretreatment Program must be submitted and approved following the procedures outlined in 40 CFR 403.18(b) and 403.9(b). However, the endorsement of local officials responsible for supervising and/or funding the pretreatment program required by 403.9(b)(2) will not be required until DEM completes a preliminary review of the submission. The DEM will evaluate and review the permittee's initial proposal for a modification and provide written notification either granting preliminary approval of the proposed modifications or stating the deficiencies contained therein. DEM's written notification will also include a determination whether the submission constitutes a substantial or non-substantial program modification as defined by 40 CFR 403.18. Should DEM determine that a deficiency exists in the proposed modification, the permittee shall submit to DEM, within thirty (30) days of the receipt of said notice, a revised submission consistent with DEM's notice of deficiency.

   Pretreatment program modifications which the permittee considers Non-substantial, shall be deemed to be approved within forty-five (45) days after submission of the request for modification, unless DEM determines that the modification is in fact a substantial modification or notifies the permittee of deficiencies. Upon receipt of notification that DEM has determined

the modification is substantial, the permittee shall initiate the procedures and comply with the deadlines for substantial modifications, which are outlined below.

For substantial modifications, the permittee shall, within sixty (60) days (unless a longer time frame is granted) of the receipt of DEM's preliminary approval of the proposed modification, submit documentation (as required by 403.9(b)(2)) that any local public notification/participation procedures required by law have been completed, including any responses to public comments, and a statement that the local officials will endorse and/or approve the modification upon approval by DEM.

Within thirty (30) days of DEM's final approval of the proposed modification(s), the permittee shall implement the modification and submit proof that the local officials have endorse and/or approved the modification(s) to the DEM. Upon final approval by the DEM and adoption by the permittee, this modification(s) shall become part of the approved pretreatment program and shall be incorporated into this permit in accordance with 40CFR 122.63(g).

g. All sampling and analysis required of the permittee, or by the permittee of any Industrial User, must be performed in accordance with the techniques described in 40 CFR 136.

h. For those Industrial Users with discharges that are not subject to Categorical Pretreatment Standards, the permittee shall require appropriate reporting in accordance with 40 CFR 403.12(h).

i. The permittee shall, in accordance with 40 CFR 403.12(f), require all Industrial Users to immediately notify the permittee of all discharges by the Industrial User that could cause problems to the POTW, including slug loadings, as summarized in 40 CFR 403.5(b).

j. The permittee shall require all Industrial Users to notify the permittee of substantial changes in discharge as specified in 40 CFR 403.12(j) and the permittee shall also notify DEM of each such substantial change in discharge prior to acceptance.

k. The permittee shall require New Sources to install and have in operation all pollution control equipment required to meet applicable Pretreatment Standards before beginning to discharge. In addition, the permittee shall require New Sources to meet all applicable Pretreatment Standards within the shortest feasible time which shall not exceed ninety (90) days in accordance with 40 CFR 403.6(b).

l. The permittee shall require all Industrial Users who are required to sample their effluent and report the results of analysis to the POTW to comply with signatory requirements contained in 40 CFR 403.12(l) when submitting such reports.

m. The permittee shall determine, based on the criteria set forth in 40 CFR 403.8(f)(2)(viii), using the EPA method of "rolling quarters", the compliance status of each Industrial User. Any Industrial User determined to meet Significant Non-Compliance (SNC) criteria shall be included in an annual public notification as specified in 40 CFR 403.8(f)(2)(viii).

n. The permittee shall require Industrial Users to comply with the notification and certification requirements of 40 CFR 403.12(p)(1), (3) and (4) pertaining to the discharge of substances to the POTW, which if disposed of otherwise, would be a hazardous waste under 40 CFR Part 261.

o. The permittee shall continue to designate, as SIUs, those Industrial Users (IUs) which meet the definition contained in 40 CFR 403.3 and the permittee's sewer use ordinance.

The permittee shall notify each newly designated SIU of its classification as an SIU within thirty (30) days of identification and shall inform the SIU of the requirements of an SIU contained in 40 CFR 403.12.

I.C.7 Categorical Industrial Users (CIUs)

a. The permittee shall require Industrial Users to comply with applicable Categorical Pretreatment Standards in addition to all applicable Pretreatment Standards and Requirements. The permittee shall require of all Categorical Industrial Users (CIUs), all reports on compliance with applicable Categorical Pretreatment Standards and Categorical Pretreatment Standard deadlines as specified in and in accordance with Sections (b), (d), (e) and (g) of 40 CFR 403.12. In addition, the permittee shall require Categorical Industrial Users to comply with the report signatory requirements contained in 40 CFR 403.12(1) when submitting such reports.

b. If the permittee applies the Combined Wastestream Formula (CWF) to develop fixed alternative discharge limits of Categorical Pretreatment Standards, the application of the CWF and the enforcement of the resulting limits must comply with 40 CFR 403.6(e). The permittee must document all calculations within the control mechanism fact sheet and the resulting limits within the CIU's control mechanism. The permittee must ensure that the most stringent limit is applied to the CIU's effluent at end-of-pipe based upon a comparison of the resulting CWF limits and the permittee's local limits.

c. If the permittee has or obtains the authority to apply and enforce equivalent mass-per-day and/or concentration limitations of production-based Categorical Pretreatment Standards, then the permittee shall calculate and enforce the limits in accordance with 40 CFR 403.6(c). The permittee must document all calculations within the control mechanism fact sheet and the resulting limits within the CIU's control mechanism.

I.C.8 Annual Report

The annual report for the permittee's Industrial Pretreatment Program shall contain information pertaining to the reporting year which shall extend from July 1 through June 30 and shall be submitted electronically to the DEM by September 15th annually as a NetDMR attachment or by an alternative electronic reporting system as it becomes available. The requirements for the annual report are included in Attachment C of this permit.

I.C.9 Interjurisdictional Agreements

The permittee has an approved Interjurisdictional Agreement with the Town of North Kingstown and shall continue to implement its approved Interjurisdictional Agreement at all times.

I.C.10 Sewer Use Regulations

The permittee has approved Sewer Use Regulations (as amended) which shall continue to be implemented at all times.

I.C.10 Monitoring and Reporting for Emerging Contaminants

The Permittee shall commence annual sampling of the below-listed types of industrial discharges into the POTW. PFAS sampling requirements do not apply to any below-listed industries that only discharge sanitary waste. 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 made available to the public.

- Platers/Metal Finishers
- Paper and Packaging Manufacturers
- Tanneries and Leather/Fabric/Carpet Treaters
- Manufacturers of Parts with Polytetrafluorethylene (PTFE) or Teflon type coatings (i.e. bearings)
- Landfill Leachate
- Centralized Waste Treaters
- Contaminated Sites

- Fire Fighting Training Facilities
- Airports
- Any Other Known or Expected Sources of PFAS

Sampling shall be for the PFAS analytes as shown in Attachment A.

The industrial discharges sampled, and the sampling results shall be summarized and included in the Annual Report required by Part I.C.7. of the permit. In the case that there are no relevant dischargers, the Annual Report must include a description of the process used to determine that there were no relevant dischargers. If the first year's PFAS sampling is not completed by the due date of the Annual Report, the Annual Report shall include a listing of the anticipated sampling date within one (1) year of the permit effective date.

I.D. Operation and Maintenance of the Sewer System

Operation and maintenance of the sewer system shall be in compliance with the General Requirements of Part II and the following terms and conditions:

I.D.1 Maintenance Staff

The permittee shall provide an adequate staff to carry out the operation, maintenance, repair, and testing functions required to ensure compliance with the terms and conditions of this permit.

I.D.2 Infiltration / Inflow

The permittee shall minimize infiltration/inflow to the sewer system. A summary report of all actions taken to minimize infiltration/inflow during the previous two (2) years shall be submitted to the DEM, Office of Water Resources, by the 15th day of January of each odd year (i.e., every two years).

I.D.3 Resiliency Planning

DEM received a Resiliency Plan from Quonset on January 17, 2020. Within one (1) year of the effective date of this permit, the permittee shall submit a revised Resiliency Plan, updated as needed, to ensure that it complies with the requirements described below.

The Resiliency Plan shall include a schedule of short-term (within the next two years) and long-term (beyond two years) actions that will be taken to maintain operation and protect key collection and treatment system assets. Projects proposed in the plan must be consistent with the current DEM-approved Wastewater Facilities Plan, if applicable, or must be addressed in a future Facilities Plan amendment or update.

The Resiliency Plan shall be consistent with the DEM's Guidance for the Consideration of Climate Change Impacts in the Planning and Design of Municipal Wastewater Collection and Treatment Infrastructure and shall also include consideration of the findings of the 2017 DEM report Implications of Climate Change for Rhode Island Wastewater Collection and Treatment Infrastructure.

The Resiliency Plan shall include, but not be limited to: (i) an assessment of current and projected impacts from natural hazards on critical components within the collection and treatment systems, as well as on the systems themselves; (ii) a plan to adapt and protect vulnerable components and systems; (iii) an analysis that provides justification for selected adaptation methods. The analysis must consider component and system design life and sea-level rise projections. For the purposes of this plan, critical components are considered those necessary to ensure the forward flow and treatment of wastewater in accordance with the limits set forth in this permit.

The Resiliency Plan shall assess the need for additional fuel-storage capacity where it is necessary to maintain standby power during times of long-duration power grid outages.

The Resiliency Plan shall also consider impacts on the WWTF from neighboring facilities during high hazard events.

The Resiliency Plan shall be subject to DEM review and approval. If DEM determines that modifications need to be made to the Plan, DEM shall notify the permittee in writing which elements of the Plan need to be modified and the reason for the needed modification. This notification shall include a schedule for making the changes. After such notification from the DEM, the permittee shall make changes to the Plan and submit the revisions to the DEM for their approval.

I.D.4 Cybersecurity Plan

Within one (1) year of the effective date of this permit, Quonset shall submit a Cybersecurity Plan and a schedule of short- and long-term actions that will be taken to maintain, operate, and protect key collection and treatment system assets. The Cybersecurity Plan must include consideration of the National Institute of Standards and Technology (NIST) Cybersecurity Framework[1] for the permitted wastewater collection and treatment system infrastructure. The Cybersecurity Plan must align with the NIST Cybersecurity Framework and the National Preparedness Goals of identification, prevention, protection, mitigation, response, and recovery and shall include, but not be limited to: (i) an assessment or Cyber Resilience Review of the facility's current cybersecurity risk and projected impacts from cyberattacks on critical components within the Permittee's collection and treatment systems, as well as on the systems themselves; (ii) an analysis that provides justification for selected actions; (iii) a list of positions/organizations to notify of any substantial cyber incidents or technical issues; and (iv) the relevant permittee staff that serve as the DEM point-of-contact for cybersecurity-related issues. The overall analysis must consider component and system design life. For the purposes of this Cybersecurity Plan, critical components are considered those necessary to ensure the forward flow and treatment of wastewater in accordance with the limits set forth in this permit. This Plan shall be subject to DEM review and approval. If DEM determines that modifications need to be made to the Plan, DEM shall notify the permittee in writing which elements of the Plan need to be modified and the reason for the needed modification. This notification shall include a schedule for making required changes. After such notification from the DEM, the permittee shall make changes to the Plan and submit the revisions to the DEM for their approval.

I.E. SLUDGE

The permittee shall conform and adhere to all conditions, practices and regulations as contained in the State of Rhode Island Rules and Regulations to the Treatment, Disposal, Utilization and Transportation of Wastewater Treatment Facility Sludge (250-RICR-150-10-3). The permittee shall comply with its Order of Approval for the disposal of sludge.

I.F. DETECTION LIMITS

All analyses of parameters under this permit must comply with the National Pollutant Discharge Elimination System (NPDES): *Use of Sufficiently Sensitive Test Methods for Permit Applications and Reporting* rule. Only sufficiently sensitive test methods may be used for analysis of parameters under this permit. The permittee shall assure that all wastewater testing required by this permit, is performed in conformance with the method detection limits below. All sludge testing required by this permit shall be in conformance with the method detection limits found in 40 CFR 503.8. 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

[1] https://nvlpubs.nist.gov/nistpubs/CSWP/NIST.CSWP.29.pdf
https://www.nist.gov/cyberframework

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):

a. "could not be analyzed" data shall be excluded, and shall not be considered as failure to comply with the permit sampling requirements;

b. 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)
1V	acrolein	10.0
2V	acrylonitrile	5.0
3V	benzene	1.0
5V	bromoform	1.0
6V	carbon tetrachloride	1.0
7V	chlorobenzene	1.0
8V	chlorodibromomethane	1.0
9V	chloroethane	1.0
10V	2-chloroethylvinyl ether	5.0
11V	chloroform	1.0
12V	dichlorobromomethane	1.0
14V	1,1-dichloroethane	1.0
15V	1,2-dichloroethane	1.0
16V	1,1-dichloroethylene	1.0
17V	1,2-dichloropropane	1.0
18V	1,3-dichloropropylene	1.0
19V	ethylbenzene	1.0
20V	methyl bromide	1.0
21V	methyl chloride	1.0
22V	methylene chloride	1.0
23V	1,1,2,2-tetrachloroethane	1.0
24V	tetrachloroethylene	1.0
25V	toluene	1.0
26V	1,2-trans-dichloroethylene	1.0
27V	1,1,1-trichloroethane	1.0
28V	1,1,2-trichloroethane	1.0
29V	trichloroethylene	1.0
31V	vinyl chloride	1.0

Acid Compounds-EPA Method 625		MDL µg/L (ppb)
1A	2-chlorophenol	1.0
2A	2,4-dichlorophenol	1.0
3A	2,4-dimethylphenol	1.0
4A	4,6-dinitro-o-cresol	1.0
5A	2,4-dinitrophenol	2.0
6A	2-nitrophenol	1.0
7A	4-nitrophenol	1.0
8A	p-chloro-m-cresol	2.0
9A	pentachlorophenol	1.0
10A	phenol	1.0
11A	2,4,6-trichlorophenol	1.0

Pesticides-EPA Method 608		MDL µg/L (ppb)
1P	aldrin	0.059
2P	alpha-BHC	0.058
3P	beta-BHC	0.043
4P	gamma-BHC	0.048
5P	delta-BHC	0.034
6P	chlordane	0.211
7P	4,4 ' -DDT	0.251
8P	4,4 ' -DDE	0.049
9P	4,4 ' -DDD	0.139
10P	dieldrin	0.082
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
22P	PCB-1248	0.283
23P	PCB-1260	0.222
24P	PCB-1016	0.494
25P	toxaphene	1.670

Base/Neutral-EPA Method 625		MDL µg/L (ppb)
1B	acenaphthene*	1.0
2B	acenaphthylene*	1.0
3B	anthracene*	1.0
4B	benzidine	4.0
5B	benzo(a)anthracene*	2.0
6B	benzo(a)pyrene*	2.0
7B	3,4-benzofluoranthene*	1.0
8B	benzo(ghi)perylene*	2.0
9B	benzo(k)fluoranthene*	2.0
10B	bis(2-chloroethoxy)methane	2.0
11B	bis(2-chloroethyl)ether	1.0
12B	bis(2-chloroisopropyl)ether	1.0
13B	bis(2-ethylhexyl)phthalate	1.0
14B	4-bromophenyl phenyl ether	1.0
15B	butylbenzyl phthalate	1.0
16B	2-chloronaphthalene	1.0
17B	4-chlorophenyl phenyl ether	1.0
18B	chrysene*	1.0
19B	dibenzo (a,h)anthracene*	2.0
20B	1,2-dichlorobenzene	1.0
21B	1,3-dichlorobenzene	1.0
22B	1,4-dichlorobenzene	1.0
23B	3,3 ' -dichlorobenzidine	2.0
24B	diethyl phthalate	1.0
25B	dimethyl phthalate	1.0
26B	di-n-butyl phthalate	1.0
27B	2,4-dinitrotoluene	2.0
28B	2,6-dinitrotoluene	2.0
29B	di-n-octyl phthalate	1.0
30B	1,2-diphenylhydrazine (as azobenzene)	1.0
31B	fluoranthene*	1.0
32B	fluorene*	1.0
33B	hexachlorobenzene	1.0
34B	hexachlorobutadiene	1.0
35B	hexachlorocyclopentadiene	2.0
36B	hexachloroethane	1.0
37B	indeno(1,2,3-cd)pyrene*	2.0
38B	isophorone	1.0
39B	naphthalene*	1.0
40B	nitrobenzene	1.0
41B	N-nitrosodimethylamine	1.0
42B	N-nitrosodi-n-propylamine	1.0
43B	N-nitrosodiphenylamine	1.0
44B	phenanthrene*	1.0
45B	pyrene*	1.0
46B	1,2,4-trichlorobenzene	1.0

*Polynuclear Aromatic Hydrocarbons

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
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, (Total, Available, Free)	10.0
Phenols, Total	50.0
Aluminum	5.0
TCDD	**
MTBE (Methyl Tert Butyl Ether)	1.0

**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.G. 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.G.1 Submittal of DMRs Using NetDMR

The permittee shall continue to submit its monthly monitoring data in discharge monitoring reports (DMRs) to DEM no later than the 15th day of the month electronically using NetDMR. When the permittee submits DMRs using NetDMR, it is not required to submit hard copies of DMRs to DEM.

I.G.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. Monthly Operating Reports
d. Pretreatment Annual Reports (see Part I.C.8) (September 15 each year) until such time that the permittee receives notification from DEM that an electronic reporting tool is available for submittal.

I.G.3 Submittal of Unauthorized Discharges Using NeT-SewerOverflow

The permittee shall submit, as needed to comply with Part II of this permit, written notice of unauthorized discharges, including Sanitary Sewer Overflow (SSO) reporting, bypasses, dry weather CSO reporting, extreme event, and anticipated bypasses using NeT-SewerOverflow. The permittee is not required to submit hard copies of these reports to DEM.

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

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

a. Transfer of Permit Notice
b. Request for Changes in Sampling Location
c. Request for Reduction in Testing Frequency
d. Request for Reduction in WET Testing Requirement
e. Report on Unacceptable Dilution Water/Request for Alternative Dilution Water for WET Testing

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.G.5 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. Written notifications required under Part II (as needed) other than those required to be submitted using NeT-SewerOverflow as described in Part I.G.3 above.
b. Notification of Outfall Relocation (30 Days Prior to Outfall Relocation)
c. Documentation of Outfall Relocation (30 Days After Outfall Relocation)
d. Outfall Dilution Study Plan (60 Days Prior to Outfall Relocation)
e. Priority Pollutant Scan Results (October 15 Each Year)
f. Species Sensitivity Report (Fourth Year of Permit)
g. Local Limits Monitoring Plan (120 Days of Permit Effective Date)
h. Local Limits Evaluation (120 Days of Permit Effective Date)
i. Infiltration/Inflow Reports (January 15 each odd year)
j. Resiliency Plan (within 1 year of Permit Effective Date)
k. Cybersecurity Plan (within 1 year of Permit Effective Date)

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.G.6 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.(l)(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:

(ii) Any unanticipated bypass which causes a violation of any effluent limitation in the permit; or
(iii) 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 pubic 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

Attachment A
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	PFTrDA	72629-94-8
Perfluorotetradecanoic acid	PFTeDA	376-06-7
Perfluoroalkyl sulfonic acids		
Acid Form		
Perfluorobutanesulfonic acid	PFBS	375-73-5
Perfluoropentansulfonic 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
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
3-Perfluoroheptyl propanoic acid	7:3FTCA	812-70-4

Attachment B

Reassessment of Technically Based Industrial Discharge Limits
Adapted by RIDEM from EPA-New England

Under 40 CFR §122.2(U)(4), all Publicly Owned Treatment Works (POTWs) with approved Industrial Pretreatment Programs (IPPs) shall provide the following information to the Director: a written evaluation of the need to revise local industrial discharge limits under 40 CFR§403.5(c)(l).

Below is a form that was designed by the U.S. Environmental Protection Agency (EPA - New England) that POTWs with approved IPPs may use when evaluating whether their existing Technically Based Local Limits (TBLLs) need to be recalculated. The form allows the permittee and EPA to evaluate and compare pertinent information used in previous TBLLs calculations against present conditions at the POTW.

Please read the directions below before filling out form.
ITEM I.

- In Column (1), list what your POTW's influent flow rate was when your existing TBLLs were calculated. In Column (2), list your POTW's present influent flow rate. Your current flow rate should be calculated using the POTW's average daily flow rate from the previous 12 months.

- In Column (1) list what your POTW's SIU flow rate was when your existing TBLLs were calculated. In Column (2), list your POTW's present SIU flow rate.

- In Column (1), list what dilution ratio and/or 7Q10 value was used in your old/expired NPDES permit. In Column (2), list what dilution ration and/or 7Q10 value is presently being used in your new/reissued NPDES permit.

  The 7Q10 value is the lowest seven-day average flow rate, in the river, over a ten year period. The 7Q10 value and/or dilution ratio used by EPA in your new NPDES permit can be found in your NPDES permit "Fact Sheet."

- In Column (1), list the safety factor, if any, that was used when your existing TBLLs were calculated.

- In Column (1), note how your bio-solids were managed when your existing TBLLs were calculated. In Column (2), note how your POTW is presently disposing of its biosolids and how your POTW will be disposing of its biosolids in the future.

ITEM II

- List what your existing TBLLs are - as they appear in your current Sewer Use Ordinance (SUO).

ITEM III

- Identify how your existing TBLLs are allocated out to your industrial community. Some pollutants may be allocated differently than others, if so please explain.

ITEM IV

- Since your existing TBLLs were calculated, identify the following in detail:
  (1) if your POTW has experienced any upsets, inhibition, interference or pass-through as a result of an industrial discharge.
  (2) if your POTW is presently violating any of its current NPDES permit limitations - include toxicity.

ITEM V

- Using current sampling data, list in Column ()) the average and maximum amount of pollutants (in pounds·per day) received in the POTW's influent. Current sampling data is defined as data obtained over the last 24 month period.

  All influent data collected and analyzed must be in accordance with 40 CFR §136. Sampling data collected should be analyzed using the lowest possible detection method(s), e.g. graphite furnace.

- Based on your existing TBLLs, as presented in Item ll., list in Column (2), for each pollutant the Maximum Allowable Headwork Loading (MAHL) values derived from an applicable environmental criteria or standard, e.g. water quality, sludge, NPDES, inhibition, etc. For more information, please see EPA's Local Limit Guidance Document (July 2004).

Item VI

- Using current sampling data, list in Column (1) the average and maximum amount of pollutants (in micrograms per liter) present your POTW's effluent. Current sampling data is defined as data obtained during the last 24 month period.

  All effluent data collected and analyzed must be in accordance with 40 CFR §136. Sampling data collected should be analyzed using the lowest possible detection method{s), e.g. graphite furnace.

- List in Column {2A) what the Water Quality Standards (WQS) were (in micrograms per liter) when your TBLLs were calculated, please note what hardness value was used at that time. Hardness should be expressed in milligram per liter of Calcium Carbonate.

  List in Column (2B) the current WQSs or "Chronic Gold Book" values for each pollutant multiplied by the dilution ratio used in your new/reissued RIPDES permit. For example, with a dilution ratio of 25: 1 at a hardness of 25 mg/I - Calcium Carbonate (copper's chronic WQS equals 6.54 ug/1) the chronic NPDES permit limit for copper would equal 156.25 ug/1.

ITEM VII

- In Column (1), list all pollutants (in micrograms per liter) limited in your new/reissued NPDES permit. In Column (2), list all pollutants limited in your old/expired NPDES permit.

ITEM VIII

- Using current sampling data, list in Column (1) the average and maximum amount of pollutants in your POTW's biosolids. Current data is defined as data obtained during the last 24 month period. Results are to be expressed as total dry weight.

  All biosolids data collected and analyzed must be in accordance with 40 CFR §136.

  In Column (2A), list current State and/or Federal sludge standards that your facility's biosolids must comply with. Also note how your POTW currently manages the disposal of its biosolids. If your POTW is planning on managing its biosolids differently, list in Column (2B) what your new biosolids criteria will be and method of disposal.

In general, please be sure the units reported are correct and all pertinent information is included in your evaluation. If you have any questions, please contact your pretreatment representative at RIDEM.

REASSESSMENT OF TECHNICALLY BASED LOCAL LIMITS (TBLLs)

POTW Name & Address _____

_____

_____

RIPDES Permit # _____

Date RIDEM approved current TBLLs: _____

Date RIDEM approved current Sewer Use Ordinance _____

ITEM 1

In Column (1) list the conditions that existed when your current TBLLs were calculated. In Column (2), list current conditions or expected conditions at your POTW.		
	Column (1) EXISTING TBLLs	**Column (2) PRESENT CONDITIONS**
POTW Flow (MGD)		
Dilution Factor or 7Q10 (from RIPDES Permit)		
SIU Flow (MGD)		
Safety Factor		
Biosolids Disposal Method		

ITEM II

EXISTING TBLLs			
POLLUTANT	**NUMERICAL LIMIT (mg/L or lb/day)**	**POLLUTANT**	**NUMERICAL LIMIT (mg/L or lb/day)**

ITEM III

Note how your existing TBLLs, listed in Item II., are allocated to your Significant Industrial Users (SIUs), i.e. uniform concentration, contributory flow, mass proportioning, other. Please specify by circling.

ITEM IV

Has your POTW experienced any upsets, inhibition, interference or pass-through from industrial sources since your existing TBLLs were calculated?
If yes, explain.

_____

_____

Has your POTW violated any of its RIPDES permit limits and/or toxicity test requirements?
If yes, explain.

_____

_____

ITEM V

Using current POTW influent sampling data fill in Column (1). In Column (2), list your Maximum Allowable Headwork Loading (MAHL) values used to derive your TBLLs listed in Item II. In addition, please note the Environmental Criteria for which each MAHL value was established, i.e. water quality, sludge, NPDES etc.

POLLUTANT	Column (1) INFLUENT DATA ANALYSES		Column (2) MAHL VALUES	
	Maximum (lb/day)	Average (lb/day)	(lb/day)	Criteria
Arsenic				
Cadmium				
Chromium				
Copper				
Cyanide				
Lead				
Mercury				
Nickel				
Silver				
Zinc				
Other (List)				

ITEM VI

Using current POTW effluent sampling data, fill in Column (1). In Column (2A) list what the Water Quality Standards (Gold Book Criteria) were at the time your existing TBLLs were developed. List in Column (2B) current Gold Book values multiplied by the dilution ratio used in your new/reissued NPDES permit.

POLLUTANT	Column (1) EFFLUENT DATA ANALYSES		Column (2) WATER QUALITY CRITERIA (GOLD BOOK)	
	Maximum (µg/L)	Average (µg/L)	(2A) From TBLLs (µg/L)	(2B) New (µg/L)
Arsenic				
***Cadmium**				
***Chromium**				
***Copper**				
Cyanide				
***Lead**				
Mercury				
***Nickel**				
Silver				
***Zinc**				
Other (List)				

*Hardness Dependent (mg/L as $CaCO_3$)

ITEM VII

In Column (1), identify all pollutants limited in your new/reissued RIPDES permit. In Column (2), identify all pollutants that were limited in your old/expired RIPDES permit.

Column (1) NEW PERMIT		Column (2) OLD PERMIT	
POLLUTANTS	LIMITATIONS (µg/L)	POLLUTANTS	LIMITATIONS (µg/L)

ITEM VIII

Using current POTW biosolids data, fill in Column (1). In Column (2A), list the biosolids criteria that was used at the time your existing TBLLs were calculated. If your POTW is planning on managing its biosolids differently, list in Column (2B) what your new biosolids criteria would be and method of disposal.

Column (1) Data Analyses		Column (2) Biosolids Criteria	
POLLUTANTS	**BIOSOLIDS AVERAGE (mg/kg)**	**(2A) FROM TBLLs (mg/kg)**	**(2B) NEW (mg/kg)**
Arsenic			
Cadmium			
Chromium			
Copper			
Cyanide			
Lead			
Mercury			
Nickel			
Silver			
Zinc			
Molybdenum			
Selenium			
Other (List)			

Attachment C
Industrial Pretreatment Program Annual Report Requirements

The permittee shall provide an annual report to the DEM that describes the POTW's pretreatment program activities, submitted electronically by September 15 annually as a NetDMR attachment or by an alternative electronic reporting system as it becomes available. Each item below must be addressed separately and any items which are not applicable must be so indicated. If any item is deemed not applicable a brief explanation must be provided.

Program Resources

1. A summary of the pretreatment program resources including the number of full-time equivalent positions, an estimate of the program budget, the source of the budget, whether there were significant changes (±20%) to the budget or to staffing in the last year, and whether the program received any additional support (i.e., contracts with consultant) that was not part of the FTE during the reporting period.
2. List all jurisdictions in the service area and whether intergovernmental agreements or other enforceable mechanism exists for these jurisdictions.

POTW Information

3. List any WET effluent violations along with the species tested.
4. List all RIPDES permit violations by parameter and violation date.
5. Include POTW design flow, BOD/CBOD capacity (lbs/day), TSS capacity (lbs/day), actual flow, and total significant industrial user (SIU) flow. Estimate percentage of all industrial flow.
6. List all parameters for which the POTW has a surcharge with the surcharge rate.

Industrial User Information

A listing of all Categorical Industrial Users (CIUs), Significant Industrial Users (SIUs), Non-Significant Categorical Industrial Users (NSCIUs), Middle Tier Categorical Industrial Users (MTCIUs), and any other categories of users established by the permittee. Include any deletions/reclassifications from previously submitted lists and the reasons for the deletions/reclassification.

7. For each SIU/CIU/NSCIU/MTCIU discharging at any point in the reporting year, provide the following information:
    a. Facility and Permit Information: name, permit id, industrial user type (SIU, CIU, etc.) permit status, permit effective date, permit expiration date, permit termination date, jurisdiction, mailing address, facility site name and address, facility type ownership. As applicable, provide reasons as to why a SIU/CIU was deleted and/or terminated since the last reporting year and/or why a SIU does not have a current, unexpired permit.
    b. Industry Information: all applicable SIC and NAICS codes. For each CIU, include the applicable categorical standard(s) by its 40 CFR part number (e.g., Metal Finishing – part 433, Electrical and Electronic Components – part 469).
    c. Baseline monitoring requirements for newly promulgated industries. Include a summary and if applicable, an evaluation of the quality and quantity of influent

introduced into the POTW and any anticipated impact due to the changed discharge on the quantity or quality of effluent to be discharged from the POTW.

d. Flow and Discharge Information: average daily process wastewater flow, average daily facility wastewater flow rate, whether there was a substantial change to the discharge, and whether notification was submitted of the changed discharge.
e. Local Limits Information: specify by parameter whether the SIU is subject to local limits and whether the local limits are more stringent than categorical standards (if applicable).
f. Compliance Information: specify whether the SIU is subject to an enforceable compliance schedule (e.g., consent agreements or compliance orders).
g. Sampling and Inspection Information: number and dates of inspections and sampling event by the control authority, number of required self-monitoring events by the SIU, actual number of self-monitoring events by the SIU, did the SIU comply with self-monitoring and reporting requirements.
h. SNC and Enforcement: specify whether the IU is in SNC, number of NOVs, whether formal or information enforcement actions were issued, dates of each action, a summary of each action, number of civil and criminal suits filed against the SIU/CIU, total penalties assessed, total penalties collected, and any additional information for all SNC and enforcement actions. Specify the violation that triggered each enforcement action, whether the IU is back into compliance, the return to compliance date, and an explanation as to how the IU was or will be returned to compliance.
i. For each NSCIU, identify whether the facility has reported its required annual compliance certification to the Control Authority, whether they discharged untreated concentrated wastewater, and whether they consistently complied with all applicable categorical pretreatment standards.
j. For each MTSIU, identify whether the Control Authority has granted reduced reporting requirements in accordance with 40 CFR 403.12(e)(3).

8. For any SIU/CIU/NSCIU/MTCIU with no permit at any time during the reporting period, provide the facility name and type, a permit status explanation, and whether the facility was unpermitted at the end of the reporting period.
9. Permitted non-SIUs – Provide a list of all permitted non-SIUs. Include any enforcement actions undertaken at non-SIUs.

Hauled Waste

10. Indicate whether the facility receives hauled waste, the type of hauled waste received (domestic, industrial, RCRA, categorical, leachate, RV Dump Station, etc.) and a description of the hauled waste discharge location. Include whether the POTW issues permits for hauled waste, has a designated site for hauled waste disposal, whether access to the disposal site is controlled, and whether the POTW uses a manifest system to track and control hauled waste. Did the POTW believe that illegal dumping may be occurring in the jurisdiction?
11. List the volume of septage received at the facility each calendar quarter.

Dental Office Compliance

12. Provide the total number of dental facilities that discharge to the POTW, the number of facilities subject to the dental amalgam rule, the number not subject to the dental amalgam rule, the number subject to the dental amalgam rule that do not place or remove dental amalgam except in limited emergency or unplanned circumstances, number of dental facilities that place or remove amalgam and are subject to the dental amalgam rule, number of dental facilities required to submit a one-time compliance report, number of one-time compliance reports received during the annual reporting year, number of enforcement actions issued.

Pass Through / Interference Information

13. Provide description, date, cause, corrective action of each instance of pass through at the facility.
14. Provide description, date, cause, and corrective action of each instance of interference at the facility.
15. If the POTW received notification of the discharge of any hazardous wastes, provide the name of the IU, date of notification, name hazardous waste, hazardous waste number, and the type of discharge.
16. Were there any other problems with the POTWs influent or effluent discharge not provided above?

Sludge Disposal

17. List all sludge disposal methods for the facility and percentage of sludge that was disposed of for each method.
18. Describe if the POTW had any disruptions in managing biosolids.

Enforcement Actions and SNC Information

19. Does the Enforcement Response Plan (ERP) include escalating enforcement actions for significant non-compliance (SNC). If not, provide and explanation.
20. List all quarters that an IU was in significant non-compliance (SNC) during the reporting period. Include the reason for SNC and whether the SNC was published in the newspaper.

Local Limits Information

21. Include the date of the most recent technically based Local Limits Evaluation and the date of the most recent adoption of local limits.
22. Submit a table with the following columns completed for each pollutant with a local limit. In Column (4) and Column (5), list the MAHL and MAIL values used to derive the facility's technically based Local Limits as submitted in the most recent approved Local Limits Evaluation.

Column 1	Column 2	Column 3	Column 4	Column 5
Pollutant	Average Monthly Local Limit (Specify Unit)	Maximum Monthly Local Limit (Specify Unit)	MAHL (lb/day)	MAIL (lb/day)

Monitoring Results

23. Submit a table with the following information calculated in the local limits section and influent sampling data.

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7
Pollutant	MAHL (lb/day)	Average Influent Data (lb/day)	Average Influent Data > MAHL	Maximum Influent Data (lb/day)	Maximum Influent Data > MAHL	Explanation

Modification History

24. Include information on all program modification in the reporting year, including a description, the type of modification, whether the modification was substantial, the date of public notice (if applicable), and the date approved. List any planned modifications.

Additional Supporting Information

25. Results of any PFAS sampling for industrial discharges required by the facility's RIPDES permit. In the case that there are no relevant dischargers, the Annual Report must include a description of the process used to determine that there were no relevant dischargers.
26. A list including the report/notification type, due date, and receipt date for each report/notification required by 40 CFR 403.12.
27. A summary of public participation efforts including meetings and workshops held with the public and/or industry and notices/newsletters/bulletins published and/or distributed.
28. A program evaluation in terms of program effectiveness, local limits application and resources which addresses but is not limited to:
    - a description of actions being taken to reduce the incidence of SNC by Industrial Users.
    - Effectiveness of enforcement response program.
    - Sufficiency of the SUO, Rules and Regulations and/or statutory authority.

29. A completed Annual Pretreatment Summary Sheet (see below).

Annual Pretreatment Report Summary Sheet

POTW Name	
RIPDES Permit ID	
Pretreatment Annual Report Start Date	
Pretreatment Report Period End Date	
Significant Industrial Users (SIUs)[1]	
Number of SIUs:	
Number of SIUs Without Control Mechanisms	
Number of SIUs Not Inspected	
Number of SIUs Not Sampled	
SIUs in Significant Non-Compliance (SNC)	
Number of SIUs in SNC with Pretreatment Standards	
Number of SIUs in SNC with Reporting Requirements	
Number of SIUs in SNC with Pretreatment Compliance Schedule[2]	
Number of SIUs Published in Newspaper	
Categorical Industrial Users (CIUs)	
Number of CIUs	
Number of CIUs in SNC	
Compliance and Enforcement	
Number of SIUs with Compliance Schedules	
Number of Violation Notices Issued to SIUs	
Number of Administrative Orders Issued to SIUs	
Number of Civil Suits Filed Against SIUs	
Number of Criminal Suits Filed Against SIUs	
Penalties	
Total Dollar Amount of Penalties Collected ($)	
Number of IUs from which Penalties have been collected	

[1]The number of SIUs includes all SIUs, including CIUs that had a permit at any point in the reporting year.

[2]Compliance schedules include consent agreements, compliance orders, etc.

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

FACT SHEET

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

RIPDES PERMIT NO. RI0100404
NAME AND ADDRESS OF APPLICANT:

Quonset Development Corporation
95 Cripe Street
North Kingstown, Rhode Island 02852

NAME AND ADDRESS OF FACILITY WHERE DISCHARGE OCCURS:

Quonset Wastewater Treatment Facility
150 Zarbo Ave.
North Kingstown, Rhode Island 02852

RECEIVING WATER: West Passage
WATERBODY ID NUMBER: RI0007027E-03C
CLASSIFICATION: SB1

TABLE OF CONTENTS

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 facility is engaged in the treatment of domestic and industrial sewage.

The discharge to the West Passage of Narragansett Bay is from the Quonset Development Corporation Wastewater Treatment Plant at Outfall 001A. The treated sewer effluent from the Wastewater Treatment Facility (WWTF) is discharged into a shared sewer and stormwater conveyance system located on the adjacent Quonset State Airport property, owned by the Rhode Island Airport Corporation and the Rhode Island Department of Transportation. The discharge to West Passage is through a 30-inch diameter pipe penetration through an existing sheet pile bulkhead located in water approximately 0.87 feet deep at mean low water. The latitude / longitude coordinates of the outfall are 41.589589, -71.404472.

On May 7, 2025, DEM issued Order of Approval No. 1765, which allows for the relocation of the current effluent discharge location to a new 30-inch ductile iron, zinc coated, cement lined sewer pipe at a new steel sheet pile cofferdam structure. The proposed new location, approximately 575 feet south of the existing outfall, would remain in the same waterbody assessment unit as the existing outfall. The cofferdam structure will be constructed such that the mixing conditions of the effluent with the Bay water will mimic the existing outfall location, providing similar water depths as the existing outfall, and setting the proposed outfall invert to match the existing outfall invert. A map which includes the facility's existing outfall location and proposed outfall location is provided in Attachment 1.

Site layout and process diagrams of the facility are shown in Attachments 2 and 3.

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 October 2018 date through March 2025 is shown in Attachment 4. A review of the historic discharge data demonstrates that the Quonset WWTF can comply with all limitations given.

III. Permit Limitations and Conditions

The final effluent limitations and monitoring requirements may be found in the permit.

IV. Permit Basis and Explanation of Effluent Limitation Derivation

Variances, Alternatives, and Justifications for Waivers of Application Requirements

No variances or alternatives to required standards were requested or granted. No waivers were requested or granted for any application requirements per 40 CFR §122.21(j) or (q).

Facility Description

The Quonset Development Corporation (QDC) owns and operates a wastewater treatment facility located at 150 Zarbo Avenue at the Quonset Point/Davisville Industrial Park in North Kingstown, Rhode Island. The discharge to the West Passage of Narragansett Bay consists of treated sanitary and industrial sewage contributed by the Industrial Park and the Town of North Kingstown. As of June 30, 2024, the end of the Quonset Wastewater Facility's most recent Industrial Pretreatment Program reporting year, there were six (6) Significant Industrial Users (SIUs) and approximately 190 other (i.e., non-SIU) permitted industrial users contributing wastewater to the QDC Wastewater Treatment Facility.

Treatment consists of the following: Coarse Screening, Grit Removal, Primary Settling, Rotating Biological

Contactors, Secondary Settling, and Chlorination. A process flow diagram is attached as Attachment 3.

QDC's most recent RIPDES permit, authorizing discharges from the above-mentioned facility, was issued on July 11, 2018. The permit became effective on October 1, 2018 and expired on October 1, 2023. The facility submitted an application for permit reissuance to the DEM on March 6, 2023. On March 22, 2023, 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 October 1, 2018 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 October 1, 2018 permit.

Receiving Water Description

The waterbody segment in the West Passage of Narragansett Bay that receives discharge from the QDC WWTF segment is described as West Passage waters in the vicinity of Quonset Point within 1500 feet of shore from the western end of the carrier pier to a point 1000 feet north of Quonset Point. The waterbody identification number for this waterbody RI0007027E-03C. This segment is located in North Kingstown, Rhode Island and is classified as a class SB1 waterbody according to the Rhode Island Water Quality Regulations. SB1 waters are designated for primary and secondary contact recreational activities and fish and wildlife habitat. They shall be suitable for aquacultural uses (other than shellfish for direct human consumption), navigation, and industrial cooling. These waters shall have good aesthetic value. Primary contact recreational activities may be impacted due to pathogens from approved wastewater discharges. However, all Class SB criteria must be met. 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).

Industrial Pretreatment Program

The permit contains a reporting requirement for a local program to regulate industrial discharges to the sewer system (referred to as pretreatment program). This program is being required under authority of Section 402(b)(8) of the CWA and 40 CFR 122.44 (j) and 403.8 because QDC receives significant discharges from 6 significant industrial user (SIUs).

The QDC WWTF's Industrial Pretreatment Program was first approved by DEM on February 1, 2000. Contributing Industrial Users to the POTW include four significant industrial users, two of which are categorical industrial users. The facility also accepts hauled waste.

Local Limits Monitoring Plan

This permit requires a local limits evaluation to be submitted within 120 days of the effective date of the permit.

Local Limits

This permit requires a local limits evaluation to be submitted within 120 days of the effective date of the permit for consistency with federal requirements (see 40 CFR 122.440)(2)(ii). No later than thirty (30) days following the final approval of the Local Limits, the permittee shall commence implementation of these limits.

Annual Report

The permit requires that Quonset submit an annual report for their industrial pretreatment program pertaining to the reporting year (July 1st- June 30th) by September 15th every year. These reports are to be submitted as NetDMR attachments as outlined in Part I.C.8 of this permit until the facility is notified by DEM that a NetPretreatment reporting tool is available for use. The requirements for the annual report are outlined in Attachment C of the permit.

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.

WWTF Conventional Pollutant Permit Limitations

Flow Limits

The basis for the facility's average monthly flow limit of 1.78 MGD is the facility's Master Plan Update dated April 2012 and approved April 27, 2012.

BOD_5, TSS, and pH

The "Average Monthly" and "Average Weekly" biochemical oxygen demand (BOD_5) and total suspended solids (TSS) limitations, the "Percent Removal" requirements for BOD_5 and TSS, and the effluent limitations for pH are based upon the secondary treatment requirements in Section 301(b)(1)(B) of the CWA, as defined in 40 CFR 133.102 (a) through (c). The "Maximum Daily" BOD_5 and TSS limits are based on Rhode Island requirements for Publicly Owned Treatment Works (POTWs) under Section 401 (a)(1) of the CWA and in 40 CFR 123.25.

Settleable Solids

Settleable Solids has been included as a process-control parameters that can aid in the assessment of the operation of the plant but need not be an effluent limit.

Oil and Grease

Oil and Grease monitoring requirements have been maintained in this permit to serve as a process control parameter as a process control parameter. Monitoring data will serve as an indicator of excessive levels of Oil and Grease which may result in blockages in the collection system and that are typically attributed to restaurants and other sources of Oil and Grease loading which discharge to the sewer collection system. QDC and DEM will be able to use this data to track and potentially initiate corrective action if necessary to prevent backups and blockages within the sewer collection system and to ensure that oil and grease levels do not cause impacts to the receiving water (i.e., "grease balls").

Bacteria

Table 10.E.1 of the RI Water Quality Regulations (RICR 250-RICR-150-05-1) includes enterococci criteria for primary contact/swimming of a geometric mean of 35 colonies/100 mL and a single sample maximum of 104 colonies/100mL. However, the "single sample maximum" value is only used to evaluate swimming advisories at designated public beaches and is not applied to the receiving water in the area of the QDC

WWTF outfall. EPA's November 12, 2008 memorandum regarding "Initial Zones of Dilution for Bacteria in Rivers and Streams Designated for Primary Contact Recreation" specifies that it is not appropriate to use dilution for bacteria criteria in receiving waters that are designated for primary contact recreation. Therefore, because the receiving water is designated for primary contact recreation, the DEM has assigned a monthly average Enterococci limit of 35 colonies/100mL. The daily maximum enterococci limit has been set at the 90% upper confidence level value for "lightly used full body contact recreation" of 276 colonies/100mL.

The DEM has also assigned fecal coliform monitoring to ensure that the discharge from the WWTP will not have an impact on any areas designated for shellfish harvesting outside of the immediate vicinity of the outfall.

WWTF Toxic Pollutant Limits

Water Quality-Based Limit (WQBEL) Calculations

Permit limits for the Quonset WWTF were developed to be consistent with Rhode Island Water Quality Regulations (250-RICR-150-05-1) and the wasteload allocation. The allowable effluent limitations were established on the basis of acute and chronic aquatic life criteria and human health criteria using the following: available instream dilution; an allocation factor; and background concentrations when available and/or appropriate. The aquatic life and human health criteria are specified in the Rhode Island Water Quality Regulations (250-RICR-150-05-1). Aquatic life criteria have been established to ensure the protection and propagation of aquatic life while human health criteria represent the pollutant levels that would not result in a significant risk to public health from ingestion of aquatic organisms. The more stringent of the two criteria was then used in establishing allowable effluent limitations. Details concerning the calculation of potential permit limitations, selection of factors, which influence their calculation, and the selection of final permit limitations are included below or in the attached documents. The facility's permit has contained WQBELs since at least the 2006 permit.

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).

An acceptable mixing zone and corresponding dilution factor for the effluent from the Quonset Point Wastewater Treatment Facility was previously determined for Outfall 001. A chronic dilution factor of 200:1 with a mixing zone of 200m in radius (approximately 656 ft.) and an acute dilution factor of 100:1 with a mixing zone of 170m in radius (approximately 558 ft.) were established based on the findings of the *Quonset Point Wastewater Treatment Facility Outfall Dilution Study* (ASA, 1993) and RIDEM's prior analysis of the raw data for ASA's Outfall Dilution Study, specifically Surveys 1 and 5 from the 1993 study referenced above. A map of the Quonset WWTF's mixing zone is presented as Attachment 5.

In response to the permittee's proposed relocation of its discharge, DEM requested that Quonset develop Cornell Mixing Zone Expert System (CORMIX) models depicting the instream mixing conditions of the existing (001) and proposed (002) outfalls to Quonset's November 26, 2024 Order of Approval Application. Water Environmental Consultants (WEC) ran three models for the existing outfall and three models for the proposed outfall design. The ambient water velocity in Narragansett Bay was varied for the three models of each outfall in order to average the modeled plume dilution at several possible tidal velocities. Based on the modeling performed, WEC found that the difference of the average dilutions of the two outfall locations is 0.09%, indicating that there is no appreciable difference between the dilution of the existing and proposed outfall locations. Since the model showed the same dilution between the existing and the proposed outfall locations, DEM used the same mixing zone and corresponding dilution factor for the new outfall. However, as required by the permit, and discussed below, DEM is requiring that the facility conduct a dilution study once the new outfall is placed into service to verify that the models are valid (i.e., that dilution at the new outfall is similar to dilution at the existing outfall). DEM will modify the permit if the dilution study indicates that the new outfall has a different dilution factor.

The Rhode Island Water Quality Regulations at 250-RICR-150-05-1.18(N)(1) require in-stream concentrations of discharged pollutants to be determined by specific formulas, or other methods which may

be found to be acceptable.

Using the above-mentioned dilution factors the allowable discharge limits were calculated as follows:

a) Background concentration unknown or available data is impacted by sources that have not yet achieved water quality-based limits.

$$Limit_1 = (DF) * (Criteria) * (80\%)$$

Where: DF = acute or chronic dilution factor, as appropriate

b) Using available background concentration data.

$$Limit_1 = (DF) * (Criteria) * 90\% - (Background) * (DF - 1)$$

Where: DF = acute or chronic dilution factor, as appropriate.

Since background data in the area of the discharge, was not available, water quality-based permit limits were calculated using equation (a) above. Reference Attachment 6 for calculations of allowable limits based on Aquatic Life and Human Health Criteria. A summary of Discharge Monitoring Report (DMR) data for the period October 2018-March 2025 and facility Priority Pollutant Scan data for the period 2019-2024 are provided in Attachment 7 and Attachment 8 , respectively. Attachment 9 is a summary comparison of the allowable limits versus the DMR data, Priority Pollutant Scan data, and permit application data.

The formulas and data noted above were applied with the following exceptions:

a) Pollutants that, based on the acute and chronic dilution factors, have a higher allowable chronic limit than allowable acute limit. For this situation, both the "Monthly Average" and "Daily Maximum" limits were set at the allowable acute limit.

b) Total residual chlorine. The limits for total residual chlorine (TRC) were established in accordance with the DEM Effluent Disinfection Policy. The "Monthly Average" and "Daily Maximum" were based on a 100% allocation, a zero background concentration, and the appropriate dilution factor(s). The 100% allocation factor for TRC was used due to the non-conservative nature of chlorine and the improbability of the receiving water having a detectable background TRC concentration.

c) Pollutants with water quality based monthly average limits in the previous RIPDES permit. The relaxation of monthly average limits from the previous permit was restricted in accordance with the antibacksliding provisions of the Clean Water Act and the Policy on the Implementation of the Antidegradation Provisions of the Rhode Island Water Quality Regulations.

Wasteload Allocation

In accordance with 40 CFR Part 122.4(d)(1)(iii), it is only necessary to establish water-quality-based permit limits for those pollutants in the discharge which have the reasonable potential to cause or contribute to the exceedance of the instream criteria. Reasonable potential to cause an exceedance is determined using the dilution factors presented in the previous section as well as the saltwater aquatic life and non-Class AA human health criteria, from the Rhode Island Water Quality Regulations (250-RICR-150-05-1) to determine allowable discharge concentrations. Allowable discharge concentrations for all parameters in Attachment 6 were calculated using 80% allocation for pollutants without background data, 90% allocation for pollutants with background data, and 100% allocation of total residual chlorine (TRC) due to the fact that chlorine is not expected to be found in ambient water, and it is a non-conservative pollutant. In the case of ammonia, since removal is strongly dependent on temperature (nitrification rate decreases as temperature decreases) and ammonia does not bioaccumulate or accumulate in sediment, seasonal dilution factors and historical pH and temperature background data were used to determine the appropriate potential ammonia limitations.

When evaluating reasonable potential, the allowable discharge concentrations (potential permit limits) were compared to Discharge Monitoring Report (DMR) data, Priority Pollutant Scan data, and data provided in the March 22, 2023 permit application. Specifically, the mean of the monthly average DMR data, the average of the Priority Pollutant Scan data reported as greater than the detection limit, and the average

concentration reported on the permit application, were compared to the "monthly average" allowable discharge concentrations, calculated using the chronic water quality criteria. Similarly, the mean of the daily maximum DMR data, the maximum of the Priority Pollutant data, and the maximum reported in the permit application were compared to the "daily maximum" allowable discharge concentrations, calculated using the acute water quality criteria. When doing this, DEM used DMR data collected during the previous six and a half years (since the 2017 permit became effective). When the monitoring data exceeds fifty percent of the allowable discharge concentration, there is "reasonable potential", and DEM assigns a water-quality-based permit limit. When the monitoring data is less than twenty-five percent of the allowable discharge concentration, there is not "reasonable potential", and DEM does not assign a water-quality-based permit limit. While DEM does not typically assign a permit limit when data is between twenty-five and fifty percent of the allowable discharge concentration, a water-quality-based permit limit may be assigned if it is determined that one is needed to be protective of human health and/or aquatic life (e.g., there is a significant variability in effluent data).

Based on these comparisons, water quality limitations have been deemed necessary for total residual chlorine and Aldrin. As noted in Part I.A.4. of the permit, after four (4) consecutive quarters, if Aldrin is not detected in the discharge (i.e., non-detect using sufficiency sensitive detection limits) over four (4) consecutive quarters, after notifying the Department and receiving written approval from the Department, the permittee may discontinue monitoring for Aldrin. Total Residual Chlorine Limitations are being maintained at an acute limit of 1.3 mg/L and chronic limit of 1.3 mg/L. Monitoring for Copper, Lead, Cyanide, Hexavalent Chromium, Cadmium, Zinc, Nickel, and Aluminum has been included in the permit as part of the bioassay requirements. The Available Cyanide limits found in the 2017 permit were removed due to a lack or reasonable potential and replaced with quarterly monitoring. Cyanide samples shall be composited then analyzed for Available Cyanide. Once the permittee receives written notification by DEM that laboratories have been certified by Rhode Island Department of Health to analyze for Free Cyanide, permittee will be required to analyze for Free Cyanide in place of Available Cyanide.

Priority Pollutants

The required priority pollutant scans are to be performed annually for the EPA Priority Pollutants as listed in 40 CFR 122, Appendix D, Tables II and III. The priority pollutant scans are typically performed during the third calendar quarter bioassay sampling event.

WET Testing

The biomonitoring requirements are set forth in 40 CFR 131.11 and in the State's Water Quality Regulations, containing narrative conditions at 250-RICR-150-05-1.10(B) that state, at a minimum, all waters shall be free of pollutants in concentrations or combinations or from anthropogenic activities subject to these regulations that: adversely affect the composition of fish and wildlife; adversely affect the physical, chemical, or biological integrity of the habitat; interfere with the propagation of fish and wildlife; adversely alter the life cycle functions, uses, processes, and activities of fish and wildlife; or adversely affect human health. In order to determine compliance with many of these conditions, Whole Effluent Toxicity (WET) testing is required. If toxicity is demonstrated, then toxicity identification and reduction will be required.

DEM's toxicity permitting policy is based on past toxicity data and the level of available dilution. QDC's bioassay limit of ≥50% effluent for an LC50 value is based on is based upon 40 CFR 131.11(b)(2). The permit requires that acute toxicity tests be conducted on a twenty-four (24) hour flow proportioned composite sample, taken just prior to chlorination, once per quarter on Mysids and once per quarter on Silversides (*Menidia spp*.). If recurrent toxicity is demonstrated, then toxicity identification and reduction will be required. WET testing requirements can be found in Section I.B. of the permit. Section I.B.12 contains a requirement for a Species Sensitivity Screening Report to be submitted during the Fourth Year of the Permit. Section I.B.12 of the permit has been added to ensure the WET limits in the permit are evaluated using the most sensitive applicable marine species.

Past bioassay monitoring data for Quonset indicates that the facility had no occurrence of toxicity exceedances between October 2018 and March 2025. The data can be found in Appendix C.

Nutrients

The effluent monitoring requirements have been specified in accordance with the RIPDES regulations as well as 40 CFR 122.41 (j), 122.44 (i), and 122.48 to yield data representative of the discharge. At this time, nutrient criteria have not been established for the receiving water. The testing requirements for TKN, Nitrate and Nitrite are necessary to determine nutrient loadings to the receiving water and are consistent with the Department's policy requiring all facilities to perform baseline nutrient monitoring. This information will aid the Department in the determination of the necessity for future nutrient removal from the treatment plant effluent.

Ammonia

The potential ammonia limitations were derived from acute and chronic water quality criteria for saltwater from the Rhode Island Water Quality Regulations (250-RICR-150-05-1), which are based upon salinity, pH, and temperature. A salinity equal to 30 ppt., pH equal to 8.0 standard units, and average temperatures equal to 20°C and 5°C during Summer and Winter seasons, respectively, were used to calculate the allowable water quality-based discharge levels for ammonia. Salinity and temperature values were based upon data contained in the Narragansett Bay Project Reports, #NBP-89-22, titled "Water Quality Survey of Narragansett Bay-A Summary of the SINBADD 1985-1986". The pH value was determined from data contained in a report titled "Monitoring of the Providence and Seekonk Rivers for Trace Metals and Associated Parameters-SPRAY Cruises I, II, III" [Deoring et al., 1988], and from a University of Rhode Island Graduate School of Oceanography research paper titled "Co-occurrence of Dinoflagellate Blooms and High pH in Marine Enclosures", [Hinga, 1992]. Water quality-based limits were not found to be necessary for Ammonia, based on a lack of reasonable potential.

Emerging Contaminants

Per-and polyfluoroalkyl substances (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. PFAS manufacturing and processing facilities, facilities using PFAS in production of other products, airports, and military installations can be contributors of PFAS releases into the air, soil, and water. Due to their widespread use and persistence in the environment, most people in the United States have been exposed to PFAS. Exposure to some PFAS above certain levels may increase risk of adverse health effects[1]. DEM is collecting information to evaluate the potential impacts that discharges of PFAS from wastewater treatment plants may have on downstream uses, which can include drinking water, recreational and aquatic life uses depending on the receiving water.

The Environmental Protection Agency (EPA) established a Drinking Water Health Advisory in 2016 for Perfluorooctanoic Acid (PFOA), Perfluorooctanesulfonic Acid (PFOS), or a combination of these chemicals at 70 parts per trillion (ppt) or 70 nanogram per liter (ng/L). This Drinking Water Health Advisory was established to protect against adverse health effects that studies have indicated can be caused by exposure to these chemicals. In 2017, the Rhode Island Department of Health (DOH) began the process of sampling public wells for these pollutants due to increasing public health concerns about their possible presence in drinking water. Also in 2017, DEM adopted the EPA health advisory as a groundwater quality standard.

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 drinking water treatment requirements if the sum of the concentrations of the following six species of PFAS exceed 20 ppt.

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

[1] EPA, *EPA's Per- and Polyfluoroalkyl Substances (PFAS) Action Plan,* EPA 823R18004, February 2019. http://www.epa.gov/sites/production/files/201902/documents/pfas_action_plan_021319_508compliant_1.pdf

The 2022 Rhode Island law is consistent with the Massachusetts Department of Environmental Protection (Mass DEP) 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(E)(1)(saltwater) 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 influent and effluent sampling for PFAS chemicals and annual sampling of certain industrial users using draft EPA Method 1633 until a 40 CFR Part 136 approved method is made available to the public.

The purpose of this monitoring and reporting requirement is to better understand potential discharges of PFAS from this facility and to inform future permitting decisions, including the potential development of water quality-based effluent limits on the facility-specific basis. 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.

The PFAS Analytes that are required to be reported are listed in Attachment A of the permit. Sampling requirements include influent, effluent, and any relevant industrial users.

Antibacksliding and Antidegredation

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 SRPWs[2], 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 ONRWs[3], 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 allowed if it is necessary to accommodate important economic and social development in the area in which the receiving

[2] SRPWs are surface waters identified by the Director as having significant recreational or ecological uses.
[3] ONRWs are a special subset of high-quality water bodies, identified by the State as having significant recreational or ecological water uses.

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 concentration[4]
C_d = discharge data[5]
DF = dilution factor

In this permit, all monthly average limitations are either the same as or more stringent than the limits in the 2018 permit. Therefore, the limits contained in this permit are consistent with the Department's anti-degradation policy.

Outfall Dilution Study

As mentioned previously, Quonset has received approval from DEM to relocate the effluent discharge from the facility. DEM is requiring that the facility submit a dilution study protocol, for DEM approval, outlining a dilution study of the new permitted discharge in the receiving water. The date of the survey shall be coordinated with DEM to ensure that the survey is conducted during critical receiving water conditions. Critical conditions include periods of low freshwater flow to the West Passage of Narragansett Bay, lower wind speeds, and lower tidal activity (i.e., neap tides).

Upon acceptance of the dilution study results, DEM will evaluate the dilution characteristics applicable pollutant-specific criteria, and all effluent sampling results to determine if revised effluent limitations or permit conditions are necessary.

[4] Data collected at a location that is unimpacted by significant point source discharges.
[5] 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.

Operations and Maintenance

Resiliency Planning Requirements

On March 30, 2017, DEM's Office of Water Resources issued *Guidance for the Consideration of Climate Change Impacts in the Planning and Design of Municipal Wastewater Collection and Treatment Infrastructure*. This guidance built on and clarified existing studies, resources, and coastal efforts, including the "TR-16" *Guide for the Design of Waste Treatment Works* that was issued by the New England Interstate Water Pollution Control Commission and the DEM report *Implications of Climate Change for RI Wastewater Collection and Treatment Infrastructure*. DEM's goal with Resiliency Plan requirements is to protect systems from interruptions in operations, damages to structural and electrical integrity, and achievement of these protections to the maximum extent practicable.

DEM received a Resiliency Plan from Quonset on January 17, 2020. Within one year of the effective date of this permit, the permittee shall submit update the Resiliency Plan, as needed, to ensure that it complies with the requirements described in Section I.D.3 of the permit.

Cybersecurity

Per Part I.D.4 of the permit, the facility is required to submit a Cybersecurity Plan and a schedule of short- and long-term actions that will be taken to maintain, operate, and protect key collection and treatment system assets. The plan shall be submitted within one year of the effective date of the permit.

Sludge Requirements

The permit contains requirements for the permittee to comply with the State's Sludge Regulations and the most current Order of Approval for sludge disposal in accordance with the requirements of Section 405(d) of the CWA. Permits must contain sludge conditions requiring compliance with limits, state laws, and applicable regulations as per Section 405(d) of the CWA and 40 CFR 503. The RIDEM Sludge Order of Approval sets forth the conditions to ensure this compliance.

Inflow and Infiltrations Reports

The permit requires that infiltration/inflow reports be submitted every two (2) years by January 15th in each odd year. The report must summarize all actions taken to minimize infiltration/inflow.

Other Conditions

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.

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 (final discharge from the WWTF after all treatment processes)

Parameter	Monthly Average (Minimum)	Weekly Average	Daily Maximum (Maximum)	Measurement Frequency	Sampling Type
Flow	1.78 MGD		--- MGD	Continuous	Recorder
BOD_5[1]	445 lbs/day		742 lbs/day	3/Week	24-Hr. Comp.
BOD_5)[1]	30 mg/L	45 mg/L	50 mg/L	3/Week	24-Hr. Comp.
BOD_5 % removal[1]	85%			1/Month	Calculated
TSS[1]	445 mg/L		742 lbs/day	3/Week	24-Hr. Comp.
TSS[1]	30 mg/L	45 mg/L	50 mg/L	3/Week	24-Hr. Comp.
TSS % removal[1]	85 mg/L			1/Month	Calculated
Settleable Solids		--- mL/L	---mL/L	1/Day	Grab
Enterococci	35/100 cfu/mL		276/100 cfu/mL	3/Week	Grab
Fecal Coliform	--- MPN/100 mL		--- MPN/100 mL	3/Week	Grab

Parameter	Monthly Average (Minimum)	Weekly Average	Daily Maximum (Maximum)	Measurement Frequency	Sampling Type
Total Residual Chlorine	1.3 mg/L		1.3 mg/L	3/Day	Grab
pH	(6.0 S.U.)		(9.0 S.U.)	2/Day	Grab
Oil and Grease			--- mg/L	1/Month	Grab
Nitrate (Nov. 1 - Apr. 30)	--- mg/L		--- mg/L	1/Month	24-Hr. Comp.
Nitrate (May 1 - Oct. 31)	--- mg/L		--- mg/L	2/Month	24-Hr. Comp.
Nitrite (Nov. 1 - Apr. 30)	--- mg/L		--- mg/L	1/Month	24-Hr. Comp.
Nitrite (May 1 - Oct. 31)	--- mg/L		--- mg/L	2/Month	24-Hr. Comp.
TKN (Nov. 1 - Apr. 30)	--- mg/L		--- mg/L	1/Month	24-Hr. Comp.
TKN (May 1 - Oct. 31)	--- mg/L		--- mg/L	2/Month	24-Hr. Comp.
Total Nitrogen (Nov. 1 – Apr. 30)	--- mg/L		--- mg/L	1/Month	Calculated
Total Nitrogen (May 1 - Oct. 31)	--- mg/L		--- mg/L	2/Month	Calculated
Total Nitrogen (Nov. 1 – Apr. 30)	--- lbs/day			1/Month	Calculated
Total Nitrogen (May 1 - Oct. 31)	--- lbs/day			2/Month	Calculated
Aldrin[2]	0.08 µg/L		104.00 µg/L	1/Quarter	Grab
Total Copper[3]	--- µg/L		--- µg/L	1/Quarter	24-Hr. Comp.
Cyanide[3, 4]	--- µg/L		--- µg/L	1/Quarter	Composite
Phenols, Total[3]	--- µg/L		--- µg/L	1/Quarter	Grab
Total Cadmium[3]	--- µg/L		--- µg/L	1/Quarter	24-Hr. Comp.
Hexavalent Chromium[3]	--- µg/L		--- µg/L	1/Quarter	24-Hr. Comp.
Total Lead [3]	--- µg/L		--- µg/L	1/Quarter	24-Hr. Comp.
Total Zinc [3]	--- µg/L		--- µg/L	1/Quarter	24-Hr. Comp.
Total Nickel [3]	--- µg/L		--- µg/L	1/Quarter	24-Hr. Comp.
Total Aluminum [3]	--- µg/L		--- µg/L	1/Quarter	24-Hr. Comp.
Ammonia, Total (as N)	--- mg/L		--- mg/L	1/Quarter	24-Hr. Comp.
Organic Carbon, Total	--- mg/L		--- mg/L	1/Quarter	24-Hr. Comp.
Mysidopsis bahia (LC_{50})[5]			50% or greater	1/Quarter	24-Hr. Comp.
Menidia spp (LC_{50})[5]			50% or greater	1/Quarter	24-Hr. Comp.
PFAS Analytes[1,6]			--- ng/L	1/Quarter	Grab

() Values in parentheses represent the minimum and maximum values.

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

[1]Samples shall be taken on the influent and effluent with appropriate allowances for hydraulic detention (flow-throµgh) time.

[2]After four (4) consecutive quarters, if the pollutant is not detected in the discharge (i.e., non-detect using sufficiency sensitive detection limits) over four (4) consecutive quarters, after notifying the Department and receiving written approval from the Department, the permittee may discontinue monitoring.

[3]Monitoring data may be obtained in conjunction with the bioassay testing required in Part I.B of the permit.

[4]Composite shall be conducted by taking three (3) grab samples per day, with a minimum of three (3) hours between grabs and preserved immediately upon collection. All three (3) samples shall be composited then analyzed for Available Cyanide. Once the permittee receives written notification by DEM that laboratories have been certified by Rhode Island Department of Health to analyze for Free Cyanide, permittee will be required to analyze for Free Cyanide in place of Available Cyanide.

[5]LC_{50} is defined as the concentration of wastewater that causes mortality to 50% of the test organisms. Therefore, a 100% limit means that a samples of 100% effluent (no dilution) shall cause no more than a 50% mortality rate.

[6]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. Additionally, report in NetDMR the results of all other PFAS analytes required to be tested as part of the method as shown in Attachment A of the permit.

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:

Samuel Kaplan, P.E.
Environmental Engineer II
RIPDES Program
Office of Water Resources
Department of Environmental Management
235 Promenade Street
Providence, Rhode Island 02908
Telephone: (401) 537-4240
Email: samuel.kaplan@dem.ri.gov

09 Oct 2025
Date

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

Attachment 1

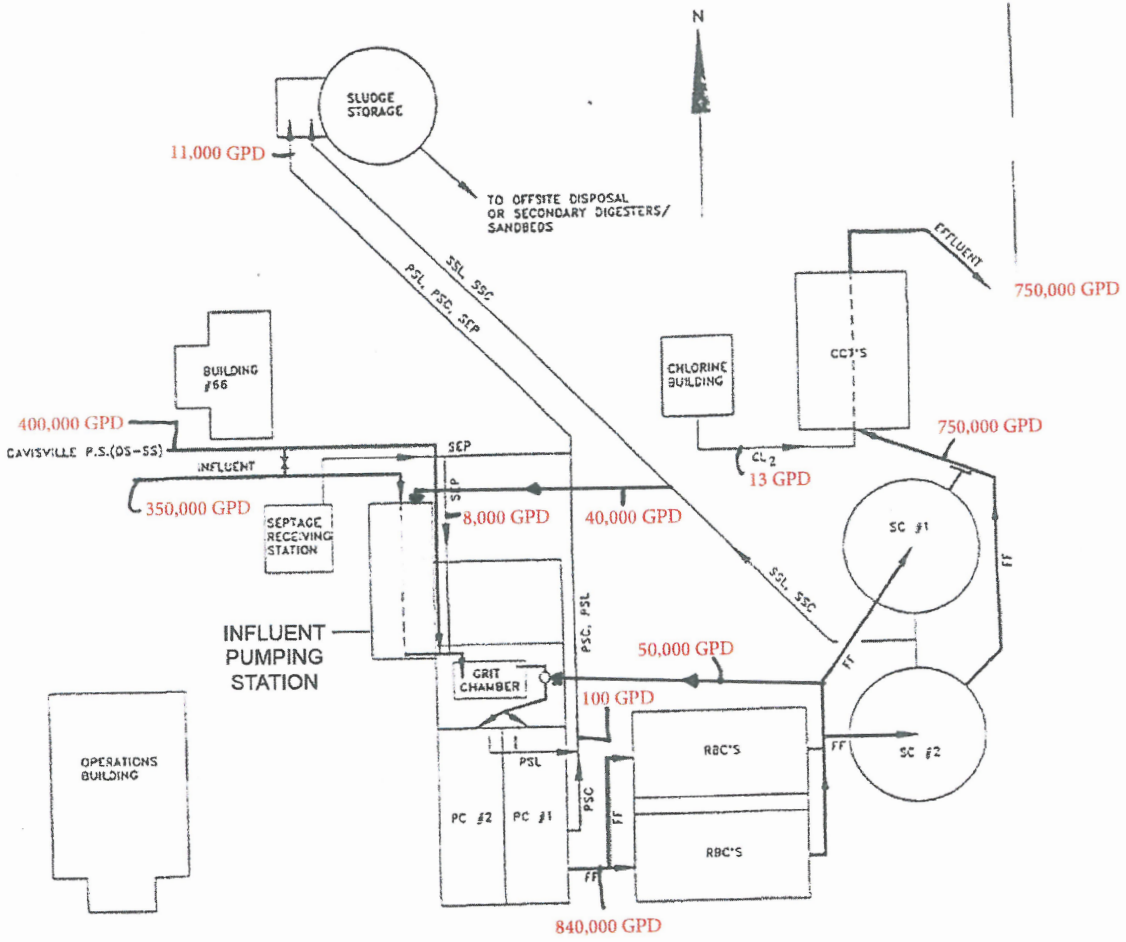
Quonset WWTF Proposed Outfall Relocation Map

Figure A-1 – Existing and proposed outfall locations

Attachment 2 – Facility Layout


Legend
POTW
North Kingstown Golf Course
Quonset Point Air National Guard Base
Quonset State Airport
Roger Williams Way
Outfall 001A
Quonset Point GDEB
150 Zarbo Ave
Compass Rose Beach
Blue Beach
Quonset Point Wastewater Treatment Facility
1 Mile Radius Plan
Outfall Lat 71-35-30 Long 71-24-15
Google Earth
Image © 2022 Maxar Technologies
N
4000 ft

Attachment 3 – Facility Process Flow Schematic



Taken from Wright Pierce Contract Documents

LEGEND

•	COMMINUTOR
SEP	SEPTAGE
PSC	PRIMARY SCUM
PSL	PRIMARY SLUDGE
PC	PRIMARY CLARIFIER
FF	FORWARD FLOW
RBC	ROTATING BIOLOGICAL CONDUCTOR
SC	SECONDARY CLARIFIER
SSL	SECONDARY SLUDGE
SSC	SECONDARY SCUM
CL_2	CHLORINE
CCT	CHLORINE CONTACT TANKS

JAMES J. GERMIA & ASSOCIATES, INC.

QUONSET BUSINESS PARK
Operations & Maintenance Manual

Process Flow Schematic

Figure 1-1

Attachment 4

Historical Effluent Data

DESCRIPTION OF DISCHARGE: Secondary Treated Domestic and Industrial Wastewater.
DISCHARGE: 001A - Secondary Treatment Discharge

AVERAGE EFFLUENT CHARACTERISTICS AT POINT OF DISCHARGE:

PARAMETER	**AVERAGE[1]**	**AVERAGE[2]**	**MAXIMUM[3]**
FLOW (MGD)	0.57		0.71
BOD_5 (LBS/DAY)	80.1		123.5
BOD_5 (mg/L)	15.72	19.43	23.41
BOD_5 (% Removal)			94.48
TSS (mg/L)	11.18	13.32	18.07
TSS (LBS/DAY)	54.49		94.66
TSS - % Removal			96.67
Oil & Grease (mg/L)	2.03		
Fecal Coliform (MPN/100 mL)	7.95		31.36
Enterococci (CFU/100 mL)	9.87		49.73
Settleable Solids (mL/L)		0.022	0.022
pH (S.U.)	7.02 (Minimum)		7.50 (Maximum)
Chlorine, Total Residual (mg/L)	0.889		1.123
Nitrate, Total (as N) (mg/L)	4.29		5.04
Nitrite, Total (as N) (mg/L)	0.74		0.98
Nitrogen, Total (Nitrate +Nitrite + TKN as N) (LBS/DAY)	130.34		
Nitrogen, Total (Nitrate +Nitrite + TKN as N) (LBS/DAY)	27.61		28.59
Total Kjeldahl Nitrogen (TKN as N) (mg/L)			
<u>Outfall 001Q</u>			
Aluminum (µg/L)	93.31		93.31
Cadmium (µg/L)	0		0

Chromium (µg/L)	0	0
Copper (µg/L)	19.23	19.23
Cyanide (µg/L)	0.21	0.28
Lead (µg/L)	0.13	0.13
Nickel (µg/L)	0.70	0.70
Zinc (µg/L)	58.2	58.2

[1]Data represents statistical mean of the monthly average data reported monthly from 10/2018 – 03/2025.
[2]Data represents statistical mean of the weekly average data reported monthly from 10/2018 – 03/2025.
[3]Data represents the statistical mean of the daily maximum data from 10/2018 – 03/2025.

Biotoxicity Data LC_{50} Values (in percent effluent)

Biotoxicity Data LC_{50} Values (in percent effluent) Mysidopsis bahia

Year	Quarter 1	Quarter 2	Quarter 3	Quarter 4
2018				100
2019	100	100	100	100
2020	100	100	100	100
2021	100	100	100	100
2022	100	100	100	100
2023	100	100	100	100
2024	100	70	100	100

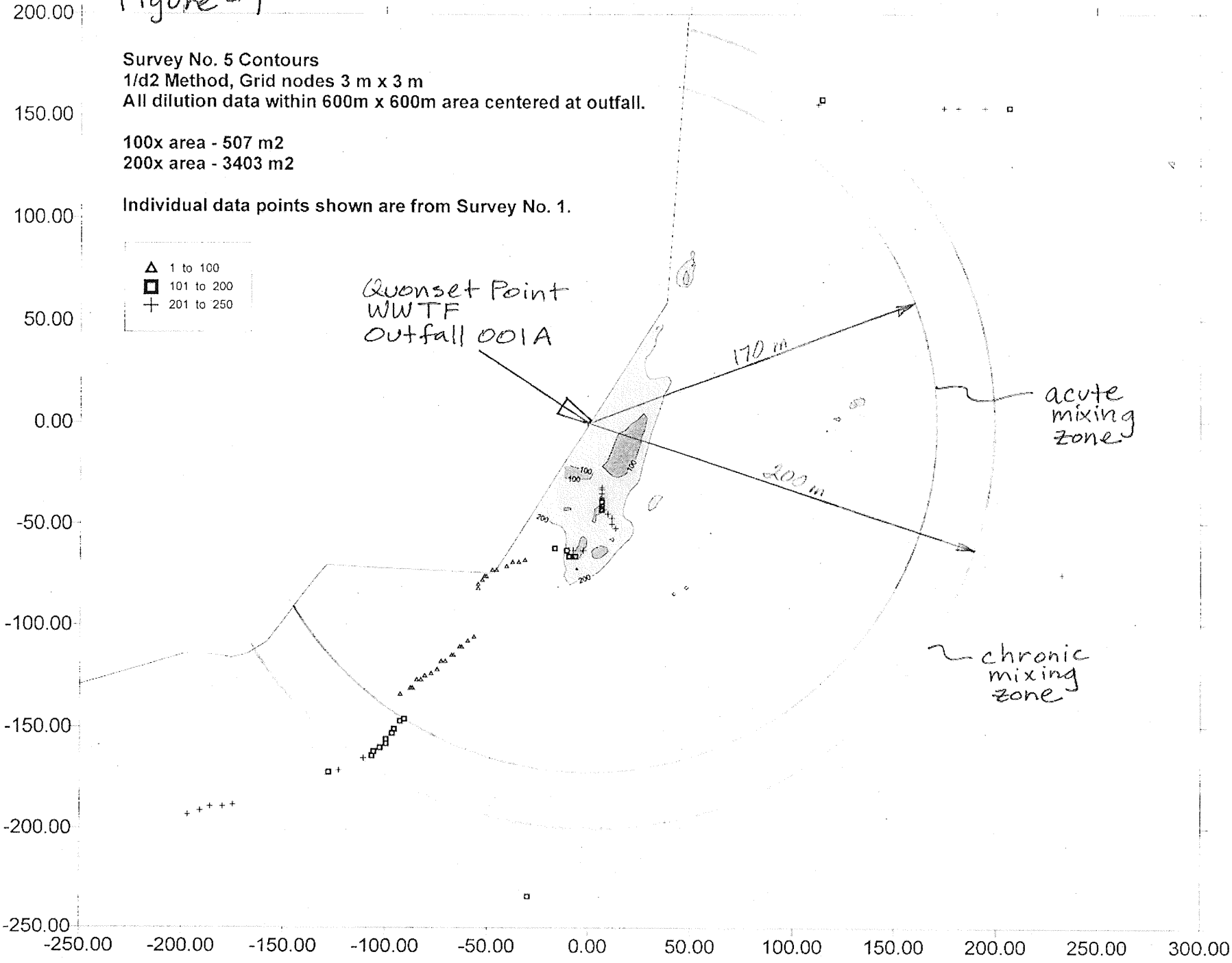
Biotoxicity Data LC_{50} Values (in percent effluent) Menidia spp

Year	Quarter 1	Quarter 2	Quarter 3	Quarter 4
2018				100
2019	100	84	100	100
2020	100	100	100	100
2021	100	100	100	63
2022	100	75	100	100
2023	100	100	51	100
2024	64	100	52	71.4

Attachment 5

Quonset WWTF Mixing Zone

Figure #1


Survey No. 5 Contours
1/d2 Method, Grid nodes 3 m x 3 m
All dilution data within 600m x 600m area centered at outfall.
100x area - 507 m2
200x area - 3403 m2
Individual data points shown are from Survey No. 1.
1 to 100
101 to 200
201 to 250
Quonset Point
WWTF
Outfall 001A
170 m
200 m
acute
mixing
zone
chronic
mixing
zone
200.00
150.00
100.00
50.00
0.00
-50.00
-100.00
-150.00
-200.00
-250.00
-250.00
-200.00
-150.00
-100.00
-50.00
0.00
50.00
100.00
150.00
200.00
250.00
300.00

Attachment 6

Calculation of Allowable Acute and Chronic Discharge Limitations Based on Saltwater Aquatic Life Criteria and Human Health Criteria

CALCULATION OF WATER QUALITY BASED SALTWATER DISCHARGE LIMITS

FACILITY SPECIFIC DATA INPUT SHEET

NOTE: LIMITS BASED ON RI WATER QUALITY CRITERIA DATED JULY 2006

FACILITY NAME: **Quonset WWTF**

RIPDES PERMIT #: **RI0100404**

	DISSOLVED BACKGROUND DATA (ug/L)	ACUTE METAL TRANSLATOR	CHRONIC METAL TRANSLATOR
ALUMINUM	**NA**	**NA**	**NA**
ARSENIC	**NA**	**1**	**1**
CADMIUM	**0.0304**	**0.994**	**0.994**
CHROMIUM III	**NA**	**NA**	**NA**
CHROMIUM VI	**0.1503**	**0.993**	**0.993**
COPPER	**0.538**	**0.83**	**0.83**
LEAD	**0.0414**	**0.951**	**0.951**
MERCURY	**NA**	**0.85**	**NA**
NICKEL	**0.8643**	**0.99**	**0.99**
SELENIUM	**NA**	**0.998**	**0.998**
SILVER	**0.0033**	**0.85**	**0.85**
ZINC	**NA**	**0.946**	**0.946**

USE NA WHEN NO DATA IS AVAILABLE

NOTE 1: BACKGROUND DATA BASED ON AVERAGE CONCENTRATIONS OBTAINED FROM THE FOUR SINBADD CRUISES IN CURRENT REPORT #: NBP-89-22 (LOCATIONS B8, B9, B15 & B16).

NOTE 2: METAL TRANSLATORS FROM RI WATER QUALITY REGS.

DILUTION FACTORS		
	ACUTE =	**100** x
	CHRONIC =	**200** x
	HUMAN HEALTH =	**200** x

NOTE: TEST WWTF'S DILUTION FACTORS OBTAINED FROM A DYE STUDY.

TOTAL AMMONIA CRITERIA (ug/L)		
WINTER	ACUTE =	**21000**
	CHRONIC =	**3100**
SUMMER	ACUTE =	**7300**
	CHRONIC =	**1100**

NOTE 1: LIMITS ARE FROM TABLE 3 IN THE RI WATER QUALITY REGS.
USING:
SALINITY = 30 g/Kg
WINTER (NOV-APRIL) pH=8.0 s.u.;
SUMMER (MAY-OCT) pH=8.0 s.u.
WINTER (NOV-APRIL) TEMP=5.0 C;
SUMMER (MAY-OCT) TEMP=20.0 C.

CALCULATION OF WATER QUALITY BASED SALTWATER DISCHARGE LIMITS

FACILITY NAME: Quonset WWTF RIPDES PERMIT #: RI0100404

NOTE: METALS CRITERIA ARE DISSOLVED, METALS LIMITS ARE TOTAL; AMMONIA CRITERIA AND LIMITS HAVE BEEN CONVERTED TO ug/l N.

CHEMICAL NAME	CAS #	BACKGROUND CONCENTRATION (ug/L)	SALTWATER CRITERIA ACUTE (ug/L)	DAILY MAX LIMIT (ug/L)	SALTWATER CRITERIA CHRONIC (ug/L)	HUMAN HEALTH NON-CLASS A CRITERIA (ug/L)	MONTHLY AVE LIMIT (ug/L)
PRIORITY POLLUTANTS:							
TOXIC METALS AND CYANIDE							
ANTIMONY	7440360			No Criteria		640	102400
ARSENIC (limits are total recoverable)	7440382	NA	69	5520	36	1.4	224
ASBESTOS	1332214			No Criteria			No Criteria
BERYLLIUM	7440417			No Criteria			No Criteria
CADMIUM (limits are total recoverable)	7440439	0.0304	40	3618.702616	8.8		1587.475252
CHROMIUM III (limits are total recoverable)	16065831	NA		No Criteria			No Criteria
CHROMIUM VI (limits are total recoverable)	18540299	0.1503	1100	99682.9006	50		9033.323565
COPPER (limits are total recoverable)	7440508	0.538	4.8	456.3108434	3.1		543.2987952
CYANIDE	57125		1	80.00	1	140	160
LEAD (limits are total recoverable)	7439921	0.0414	210	19869.50726	8.1		1524.459937
MERCURY (limits are total recoverable)	7439976	NA	1.8	169.4117647	0.94	0.15	24
NICKEL (limits are total recoverable)	7440020	0.8643	74	6640.842727	8.2	4600	1317.176061
SELENIUM (limits are total recoverable)	7782492	NA	290	23246.49299	71	4200	11382.76553
SILVER (limits are total recoverable)	7440224	0.0033	1.9	200.7921176			No Criteria
THALLIUM	7440280			No Criteria		0.47	75.2
ZINC (limits are total recoverable)	7440666	NA	90	7610.993658	81	26000	13699.78858
VOLATILE ORGANIC COMPOUNDS							
ACROLEIN	107028			No Criteria		290	46400
ACRYLONITRILE	107131			No Criteria		2.5	400
BENZENE	71432			No Criteria		510	81600
BROMOFORM	75252			No Criteria		1400	224000
CARBON TETRACHLORIDE	56235			No Criteria		16	2560
CHLOROBENZENE	108907			No Criteria		1600	256000
CHLORODIBROMOMETHANE	124481			No Criteria		130	20800
CHLOROFORM	67663			No Criteria		4700	752000
DICHLOROBROMOMETHANE	75274			No Criteria		170	27200
1,2DICHLOROETHANE	107062			No Criteria		370	59200
1,1DICHLOROETHYLENE	75354			No Criteria		7100	1136000
1,2DICHLOROPROPANE	78875			No Criteria		150	24000
1,3DICHLOROPROPYLENE	542756			No Criteria		21	3360
ETHYLBENZENE	100414			No Criteria		2100	336000
BROMOMETHANE (methyl bromide)	74839			No Criteria		1500	240000
CHLOROMETHANE (methyl chloride)	74873			No Criteria			No Criteria
METHYLENE CHLORIDE	75092			No Criteria		5900	944000

CALCULATION OF WATER QUALITY BASED SALTWATER DISCHARGE LIMITS

FACILITY NAME: Quonset WWTF RIPDES PERMIT #: RI0100404

NOTE: METALS CRITERIA ARE DISSOLVED, METALS LIMITS ARE TOTAL; AMMONIA CRITERIA AND LIMITS HAVE BEEN CONVERTED TO ug/l N.

CHEMICAL NAME	CAS #	BACKGROUND CONCENTRATION (ug/L)	SALTWATER CRITERIA ACUTE (ug/L)	DAILY MAX LIMIT (ug/L)	SALTWATER CRITERIA CHRONIC (ug/L)	HUMAN HEALTH NON-CLASS A CRITERIA (ug/L)	MONTHLY AVE LIMIT (ug/L)
1,1,2,2TETRACHLOROETHANE	79345			No Criteria		40	6400
TETRACHLOROETHYLENE	127184			No Criteria		33	5280
TOLUENE	108883			No Criteria		15000	2400000
1,2TRANSDICHLOROETHYLENE	156605			No Criteria		10000	1600000
1,1,1TRICHLOROETHANE	71556			No Criteria			No Criteria
1,1,2TRICHLOROETHANE	79005			No Criteria		160	25600
TRICHLOROETHYLENE	79016			No Criteria		300	48000
VINYL CHLORIDE	75014			No Criteria		2.4	384
ACID ORGANIC COMPOUNDS							
2CHLOROPHENOL	95578			No Criteria		150	24000
2,4DICHLOROPHENOL	120832			No Criteria		290	46400
2,4DIMETHYLPHENOL	105679			No Criteria		850	136000
4,6DINITRO2METHYL PHENOL	534521			No Criteria		280	44800
2,4DINITROPHENOL	51285			No Criteria		5300	848000
4NITROPHENOL	88755			No Criteria			No Criteria
PENTACHLOROPHENOL	87865		13	1040	7.9	30	1264
PHENOL	108952			No Criteria		1700000	272000000
2,4,6TRICHLOROPHENOL	88062			No Criteria		24	3840
BASE NEUTRAL COMPUNDS							
ACENAPHTHENE	83329			No Criteria		990	158400
ANTHRACENE	120127			No Criteria		40000	6400000
BENZIDINE	92875			No Criteria		0.002	0.32
POLYCYCLIC AROMATIC HYDROCARBONS				No Criteria		0.18	28.8
BIS(2CHLOROETHYL)ETHER	111444			No Criteria		5.3	848
BIS(2CHLOROISOPROPYL)ETHER	108601			No Criteria		65000	10400000
BIS(2ETHYLHEXYL)PHTHALATE	117817			No Criteria		22	3520
BUTYL BENZYL PHTHALATE	85687			No Criteria		1900	304000
2CHLORONAPHTHALENE	91587			No Criteria		1600	256000
1,2DICHLOROBENZENE	95501			No Criteria		1300	208000
1,3DICHLOROBENZENE	541731			No Criteria		960	153600
1,4DICHLOROBENZENE	106467			No Criteria		190	30400
3,3DICHLOROBENZIDENE	91941			No Criteria		0.28	44.8
DIETHYL PHTHALATE	84662			No Criteria		44000	7040000
DIMETHYL PHTHALATE	131113			No Criteria		1100000	176000000
DInBUTYL PHTHALATE	84742			No Criteria		4500	720000
2,4DINITROTOLUENE	121142			No Criteria		34	5440

CALCULATION OF WATER QUALITY BASED SALTWATER DISCHARGE LIMITS

FACILITY NAME: Quonset WWTF RIPDES PERMIT #: RI0100404

NOTE: METALS CRITERIA ARE DISSOLVED, METALS LIMITS ARE TOTAL; AMMONIA CRITERIA AND LIMITS HAVE BEEN CONVERTED TO ug/l N.

CHEMICAL NAME	CAS #	BACKGROUND CONCENTRATION (ug/L)	SALTWATER CRITERIA ACUTE (ug/L)	DAILY MAX LIMIT (ug/L)	SALTWATER CRITERIA CHRONIC (ug/L)	HUMAN HEALTH NON-CLASS A CRITERIA (ug/L)	MONTHLY AVE LIMIT (ug/L)
1,2DIPHENYLHYDRAZINE	122667			No Criteria		2	320
FLUORANTHENE	206440			No Criteria		140	22400
FLUORENE	86737			No Criteria		5300	848000
HEXACHLOROBENZENE	118741			No Criteria		0.0029	0.464
HEXACHLOROBUTADIENE	87683			No Criteria		180	28800
HEXACHLOROCYCLOPENTADIENE	77474			No Criteria		1100	176000
HEXACHLOROETHANE	67721			No Criteria		33	5280
ISOPHORONE	78591			No Criteria		9600	1536000
NAPHTHALENE	91203			No Criteria			No Criteria
NITROBENZENE	98953			No Criteria		690	110400
NNITROSODIMETHYLAMINE	62759			No Criteria		30	4800
NNITROSODINPROPYLAMINE	621647			No Criteria		5.1	816
NNITROSODIPHENYLAMINE	86306			No Criteria		60	9600
PYRENE	129000			No Criteria		4000	640000
1,2,4trichlorobenzene	120821			No Criteria		70	11200
PESTICIDES/PCBs							
ALDRIN	309002		1.3	104		0.0005	0.08
Alpha BHC	319846			No Criteria		0.049	7.84
Beta BHC	319857			No Criteria		0.17	27.2
Gamma BHC (Lindane)	58899		0.16	12.8		1.8	288
CHLORDANE	57749		0.09	7.2	0.004	0.0081	0.64
4,4DDT	50293		0.13	10.4	0.001	0.0022	0.16
4,4DDE	72559			No Criteria		0.0022	0.352
4,4DDD	72548			No Criteria		0.0031	0.496
DIELDRIN	60571		0.71	56.8	0.0019	0.00054	0.0864
ENDOSULFAN (alpha)	959988		0.034	2.72	0.0087	89	1.392
ENDOSULFAN (beta)	33213659		0.034	2.72	0.0087	89	1.392
ENDOSULFAN (sulfate)	1031078			No Criteria		89	14240
ENDRIN	72208		0.037	2.96	0.0023	0.06	0.368
ENDRIN ALDEHYDE	7421934			No Criteria		0.3	48
HEPTACHLOR	76448		0.053	4.24	0.0036	0.00079	0.1264
HEPTACHLOR EPOXIDE	1024573		0.053	4.24	0.0036	0.00039	0.0624
POLYCHLORINATED BIPHENYLS3	1336363			No Criteria	0.03	0.00064	0.1024
2,3,7,8TCDD (Dioxin)	1746016			No Criteria		0.000000051	0.00000816
TOXAPHENE	8001352		0.21	16.8	0.0002	0.0028	0.032
TRIBUTYLTIN			0.42	33.6	0.0074		1.184

CALCULATION OF WATER QUALITY BASED SALTWATER DISCHARGE LIMITS

FACILITY NAME: Quonset WWTF RIPDES PERMIT #: RI0100404

NOTE: METALS CRITERIA ARE DISSOLVED, METALS LIMITS ARE TOTAL; AMMONIA CRITERIA AND LIMITS HAVE BEEN CONVERTED TO ug/l N.

CHEMICAL NAME	CAS #	BACKGROUND CONCENTRATION (ug/L)	SALTWATER CRITERIA ACUTE (ug/L)	DAILY MAX LIMIT (ug/L)	SALTWATER CRITERIA CHRONIC (ug/L)	HUMAN HEALTH NON-CLASS A CRITERIA (ug/L)	MONTHLY AVE LIMIT (ug/L)
NON PRIORITY POLLUTANTS:							
OTHER SUBSTANCES							
ALUMINUM (limits are total recoverable)	7429905	NA		No Criteria			No Criteria
AMMONIA as N (winter/summer)	7664417		17262 | 6000.6	1380960 480048	2548 | 904.2		407712 | 144672
4BROMOPHENYL PHENYL ETHER				No Criteria			No Criteria
CHLORIDE	16887006			No Criteria			No Criteria
CHLORINE	7782505		13	1300	7.5		1500
4CHLORO2METHYLPHENOL				No Criteria			No Criteria
1CHLORONAPHTHALENE				No Criteria			No Criteria
4CHLOROPHENOL	106489			No Criteria			No Criteria
2,4DICHLORO6METHYLPHENOL				No Criteria			No Criteria
1,1DICHLOROPROPANE				No Criteria			No Criteria
1,3DICHLOROPROPANE	142289			No Criteria			No Criteria
2,3DINITROTOLUENE				No Criteria			No Criteria
2,4DINITRO6METHYL PHENOL				No Criteria			No Criteria
IRON	7439896			No Criteria			No Criteria
pentachlorobenzene	608935			No Criteria			No Criteria
PENTACHLOROETHANE				No Criteria			No Criteria
1,2,3,5tetrachlorobenzene				No Criteria			No Criteria
1,1,1,2TETRACHLOROETHANE	630206			No Criteria			No Criteria
2,3,4,6TETRACHLOROPHENOL	58902			No Criteria			No Criteria
2,3,5,6TETRACHLOROPHENOL				No Criteria			No Criteria
2,4,5TRICHLOROPHENOL	95954			No Criteria			No Criteria
2,4,6TRINITROPHENOL	88062			No Criteria			No Criteria
XYLENE	1330207			No Criteria			No Criteria

CALCULATION OF WATER QUALITY BASED SALTWATER DISCHARGE LIMITS

FACILITY NAME: Quonset WWTF RIPDES PERMIT #: RI0100404

CHEMICAL NAME	CAS#	DAILY MAX LIMIT (ug/L)	MONTHLY AVE LIMIT (ug/L)
PRIORITY POLLUTANTS:			
TOXIC METALS AND CYANIDE			
ANTIMONY	7440360	No Criteria	102400.00
ARSENIC, TOTAL	7440382	5520.00	224.00
ASBESTOS	1332214	No Criteria	No Criteria
BERYLLIUM	7440417	No Criteria	No Criteria
CADMIUM, TOTAL	7440439	3618.70	1587.48
CHROMIUM III, TOTAL	16065831	No Criteria	No Criteria
CHROMIUM VI, TOTAL	18540299	99682.90	9033.32
COPPER, TOTAL	7440508	456.31	456.31
CYANIDE	57125	80.00	80.00
LEAD, TOTAL	7439921	19869.51	1524.46
MERCURY, TOTAL	7439976	169.41	24.00
NICKEL, TOTAL	7440020	6640.84	1317.18
SELENIUM, TOTAL	7782492	23246.49	11382.77
SILVER, TOTAL	7440224	200.79	No Criteria
THALLIUM	7440280	No Criteria	75.20
ZINC, TOTAL	7440666	7610.99	7610.99
VOLATILE ORGANIC COMPOUNDS			
ACROLEIN	107028	No Criteria	46400.00
ACRYLONITRILE	107131	No Criteria	400.00
BENZENE	71432	No Criteria	81600.00
BROMOFORM	75252	No Criteria	224000.00
CARBON TETRACHLORIDE	56235	No Criteria	2560.00
CHLOROBENZENE	108907	No Criteria	256000.00
CHLORODIBROMOMETHANE	124481	No Criteria	20800.00
CHLOROFORM	67663	No Criteria	752000.00
DICHLOROBROMOMETHANE	75274	No Criteria	27200.00
1,2DICHLOROETHANE	107062	No Criteria	59200.00
1,1DICHLOROETHYLENE	75354	No Criteria	1136000.00
1,2DICHLOROPROPANE	78875	No Criteria	24000.00
1,3DICHLOROPROPYLENE	542756	No Criteria	3360.00
ETHYLBENZENE	100414	No Criteria	336000.00
BROMOMETHANE (methyl bromide)	74839	No Criteria	240000.00
CHLOROMETHANE (methyl chloride)	74873	No Criteria	No Criteria
METHYLENE CHLORIDE	75092	No Criteria	944000.00
1,1,2,2TETRACHLOROETHANE	79345	No Criteria	6400.00
TETRACHLOROETHYLENE	127184	No Criteria	5280.00
TOLUENE	108883	No Criteria	2400000.00
1,2TRANSDICHLOROETHYLENE	156605	No Criteria	1600000.00
1,1,1TRICHLOROETHANE	71556	No Criteria	No Criteria
1,1,2TRICHLOROETHANE	79005	No Criteria	25600.00
TRICHLOROETHYLENE	79016	No Criteria	48000.00
VINYL CHLORIDE	75014	No Criteria	384.00
ACID ORGANIC COMPOUNDS			
2CHLOROPHENOL	95578	No Criteria	24000.00
2,4DICHLOROPHENOL	120832	No Criteria	46400.00
2,4DIMETHYLPHENOL	105679	No Criteria	136000.00
4,6DINITRO2METHYL PHENOL	534521	No Criteria	44800.00
2,4DINITROPHENOL	51285	No Criteria	848000.00
4NITROPHENOL	88755	No Criteria	No Criteria
PENTACHLOROPHENOL	87865	1040.00	1040.00
PHENOL	108952	No Criteria	272000000.00
2,4,6TRICHLOROPHENOL	88062	No Criteria	3840.00
BASE NEUTRAL COMPUNDS			
ACENAPHTHENE	83329	No Criteria	158400.00
ANTHRACENE	120127	No Criteria	6400000.00
BENZIDINE	92875	No Criteria	0.32
PAHs		No Criteria	28.80
BIS(2CHLOROETHYL)ETHER	111444	No Criteria	848.00
BIS(2CHLOROISOPROPYL)ETHER	108601	No Criteria	10400000.00
BIS(2ETHYLHEXYL)PHTHALATE	117817	No Criteria	3520.00
BUTYL BENZYL PHTHALATE	85687	No Criteria	304000.00
2CHLORONAPHTHALENE	91587	No Criteria	256000.00
1,2DICHLOROBENZENE	95501	No Criteria	208000.00
1,3DICHLOROBENZENE	541731	No Criteria	153600.00
1,4DICHLOROBENZENE	106467	No Criteria	30400.00
3,3DICHLOROBENZIDENE	91941	No Criteria	44.80
DIETHYL PHTHALATE	84662	No Criteria	7040000.00
DIMETHYL PHTHALATE	131113	No Criteria	176000000.00
DI-n-BUTYL PHTHALATE	84742	No Criteria	720000.00
2,4DINITROTOLUENE	121142	No Criteria	5440.00
1,2DIPHENYLHYDRAZINE	122667	No Criteria	320.00
FLUORANTHENE	206440	No Criteria	22400.00

CALCULATION OF WATER QUALITY BASED SALTWATER DISCHARGE LIMITS

FACILITY NAME: Quonset WWTF RIPDES PERMIT #: RI0100404

CHEMICAL NAME	CAS#	DAILY MAX LIMIT (ug/L)	MONTHLY AVE LIMIT (ug/L)
FLUORENE	86737	No Criteria	848000.00
HEXACHLOROBENZENE	118741	No Criteria	0.46
HEXACHLOROBUTADIENE	87683	No Criteria	28800.00
HEXACHLOROCYCLOPENTADIENE	77474	No Criteria	176000.00
HEXACHLOROETHANE	67721	No Criteria	5280.00
ISOPHORONE	78591	No Criteria	1536000.00
NAPHTHALENE	91203	No Criteria	No Criteria
NITROBENZENE	98953	No Criteria	110400.00
N-NITROSODIMETHYLAMINE	62759	No Criteria	4800.00
N-NITROSODI-N-PROPYLAMINE	621647	No Criteria	816.00
N-NITROSODIPHENYLAMINE	86306	No Criteria	9600.00
PYRENE	129000	No Criteria	640000.00
1,2,4trichlorobenzene	120821	No Criteria	11200.00
PESTICIDES/PCBs			
ALDRIN	309002	104.00	0.08
Alpha BHC	319846	No Criteria	7.84
Beta BHC	319857	No Criteria	27.20
Gamma BHC (Lindane)	58899	12.80	12.80
CHLORDANE	57749	7.20	0.64
4,4DDT	50293	10.40	0.16
4,4DDE	72559	No Criteria	0.35
4,4DDD	72548	No Criteria	0.50
DIELDRIN	60571	56.80	0.09
ENDOSULFAN (alpha)	959988	2.72	1.39
ENDOSULFAN (beta)	33213659	2.72	1.39
ENDOSULFAN (sulfate)	1031078	No Criteria	14240.00
ENDRIN	72208	2.96	0.37
ENDRIN ALDEHYDE	7421934	No Criteria	48.00
HEPTACHLOR	76448	4.24	0.13
HEPTACHLOR EPOXIDE	1024573	4.24	0.06
POLYCHLORINATED BIPHENYLS3	1336363	No Criteria	0.10
2,3,7,8TCDD (Dioxin)	1746016	No Criteria	0.00
TOXAPHENE	8001352	16.80	0.03
TRIBUTYLTIN		33.60	1.18

CHEMICAL NAME	CAS#	DAILY MAX LIMIT (ug/L)	MONTHLY AVE LIMIT (ug/L)
NON PRIORITY POLLUTANTS:			
OTHER SUBSTANCES			
ALUMINUM, TOTAL	7429905	No Criteria	No Criteria
AMMONIA (as N), WINTER (NOV-APR	7664417	1380960.00	407712.00
AMMONIA (as N), SUMMER (MAY-OC	7664417	480048.00	144672.00
4BROMOPHENYL PHENYL ETHER		No Criteria	No Criteria
CHLORIDE	16887006	No Criteria	No Criteria
CHLORINE	7782505	1300.00	1300.00
4CHLORO2METHYLPHENOL		No Criteria	No Criteria
1CHLORONAPHTHALENE		No Criteria	No Criteria
4CHLOROPHENOL	106489	No Criteria	No Criteria
2,4DICHLORO6METHYLPHENOL		No Criteria	No Criteria
1,1DICHLOROPROPANE		No Criteria	No Criteria
1,3DICHLOROPROPANE	142289	No Criteria	No Criteria
2,3DINITROTOLUENE		No Criteria	No Criteria
2,4DINITRO6METHYL PHENOL		No Criteria	No Criteria
IRON	7439896	No Criteria	No Criteria
pentachlorobenzene	608935	No Criteria	No Criteria
PENTACHLOROETHANE		No Criteria	No Criteria
1,2,3,5tetrachlorobenzene		No Criteria	No Criteria
1,1,1,2TETRACHLOROETHANE	630206	No Criteria	No Criteria
2,3,4,6TETRACHLOROPHENOL	58902	No Criteria	No Criteria
2,3,5,6TETRACHLOROPHENOL		No Criteria	No Criteria
2,4,5TRICHLOROPHENOL	95954	No Criteria	No Criteria
2,4,6TRINITROPHENOL	88062	No Criteria	No Criteria
XYLENE	1330207	No Criteria	No Criteria

Attachment 7

Summary of Discharge Monitoring Report Data
October 2018 through March 2025

QUONSET WWTF

DMR Data Summary 5/6/25

***** NOT ICIS CERTIFIED*****

001A

BOD, 5-day, 20 deg. C Loca

	MO AVG lb/d	DAILY MX lb/d
Mean	80.1022	123.4924
Minimum	34.88	46.72
Maximum	166.94	276.76
Data Count	78	78

	MO AVG mg/L	WKLY AVG mg/L	DAILY MX mg/L
Mean	15.7192	19.4264	23.4064
Minimum	7.6	8.8	10.3
Maximum	28.4	38.3	51.4
Data Count	78	78	78

Chlorine, total residual Locat

	MO AVG mg/L	DAILY MX mg/L
Mean	.8885	1.1227
Minimum	.61	.84
Maximum	1.14	1.29
Data Count	78	78

Coliform, fecal general Locat

	MO AVG MPN/100mL	DAILY MX MPN/100mL
Mean	7.9467	31.3564
Minimum	1.05	2.
Maximum	30.22	233.
Data Count	78	78

Cyanide, free available Loca

	MO AVG ug/L	DAILY MX ug/L
Mean	.2136	.2792
Minimum	.	.
Maximum	11.3	11.3
Data Count	77	77

Enterococci Location= 1

	MO AVG CFU/100mL	DAILY MX CFU/100mL
Mean	9.8669	49.7308
Minimum	1.	1.
Maximum	35.29	560.
Data Count	78	78

Flow, in conduit or thru treatm

	MO AVG MGD	DAILY MX MGD
Mean	.5696	.7063
Minimum	.365	.487
Maximum	.748	.962
Data Count	78	78

Nitrogen, Kjeldahl, total [as N

	MO AVG mg/L	DAILY MX mg/L
Mean	22.5132	24.1518
Minimum	4.39	4.83
Maximum	37.	37.6
Data Count	78	78

Nitrogen, nitrate total [as N] L

	MO AVG mg/L	DAILY MX mg/L
Mean	4.2928	5.0418
Minimum	.	.
Maximum	17.95	18.8
Data Count	78	78

Nitrogen, nitrite total [as N] L

	MO AVG mg/L	DAILY MX mg/L
Mean	.7407	.9782
Minimum	.02	.02
Maximum	5.89	11.2
Data Count	78	78

Nitrogen, total [as N] Locatio

	MO AVG lb/d
Mean	130.339
Minimum	76.52
Maximum	216.41
Data Count	78

	MO AVG mg/L	DAILY MX mg/L
Mean	27.614	28.5905
Minimum	14.08	14.08
Maximum	38.89	50.7
Data Count	78	78

Oil & Grease Location= 1

	DAILY MX mg/L
Mean	2.0295
Minimum	.
Maximum	10.6
Data Count	78

pH Location= 1

	MINIMUM SU	MAXIMUM SU
Mean	7.0218	7.5015
Minimum	6.38	7.26

Maximum	7.29	7.87
Data Count	78	78

Solids, settleable Location=

	WKLY AVG mL/L	DAILY MX mL/L
Mean	.0218	.0218
Minimum	.	.
Maximum	.1	.1
Data Count	78	78

Solids, total suspended Loca

	MO AVG lb/d	DAILY MX lb/d
Mean	54.4859	94.6559
Minimum	14.44	27.59
Maximum	111.69	200.23
Data Count	78	78

	MO AVG mg/L	WKLY AVG mg/L	DAILY MX mg/L
Mean	11.1821	13.3168	18.0654
Minimum	4.	5.5	7.6
Maximum	20.8	24.2	43.
Data Count	78	78	78

BOD, 5-day, 20 deg. C Loca

	MO AVG lb/d	DAILY MX lb/d
Mean	1940.191	2665.0586
Minimum	907.27	1073.07
Maximum	3165.47	5608.67
Data Count	78	78

	MO AVG mg/L	WKLY AVG mg/L	DAILY MX mg/L
Mean	310.9885	355.0212	416.6192
Minimum	183.9	212.	252.
Maximum	435.7	562.	940.
Data Count	78	78	78

Solids, total suspended Loca

	MO AVG lb/d	DAILY MX lb/d
Mean	2096.2335	3179.5058
Minimum	1085.64	1567.86
Maximum	3654.42	7160.01
Data Count	78	78

	MO AVG mg/L	WKLY AVG mg/L	DAILY MX mg/L
Mean	355.5551	404.7949	510.2949
Minimum	236.8	256.	303.
Maximum	526.	629.	1200.
Data Count	78	78	78

BOD, 5-day, percent removal

	MINIMUM %

Mean	94.4762
Minimum	87.1
Maximum	97.5
Data Count	78

Solids, suspended percent re

	MINIMUM %
Mean	96.6658
Minimum	93.7
Maximum	98.6
Data Count	78

001Q

Aluminum, total [as Al] Locat

	MO AVG ug/L	DAILY MX ug/L
Mean	93.3192	93.3192
Minimum	50.	50.
Maximum	214.	214.
Data Count	26	26

Cadmium, total [as Cd] Loca

	MO AVG ug/L	DAILY MX ug/L
Mean	.	.
Minimum	.	.
Maximum	.	.
Data Count	26	26

Chromium, total [as Cr] Loca

	MO AVG ug/L	DAILY MX ug/L
Mean	.	.
Minimum	.	.
Maximum	.	.
Data Count	26	26

Copper, total [as Cu] Locatio

	MO AVG ug/L	DAILY MX ug/L
Mean	19.2308	19.2308
Minimum	12.	12.
Maximum	28.6	28.6
Data Count	26	26

Lead, total [as Pb] Location=

	MO AVG ug/L	DAILY MX ug/L
Mean	.1346	.1346
Minimum	.	.
Maximum	3.5	3.5
Data Count	26	26

Nickel, total [as Ni] Location=

	MO AVG ug/L	DAILY MX ug/L
Mean	.6988	.6988
Minimum	.	.
Maximum	6.1	6.1
Data Count	26	26

Zinc, total [as Zn] Location=

	MO AVG ug/L	DAILY MX ug/L
Mean	58.1538	58.1538
Minimum	32.7	32.7
Maximum	123.	123.
Data Count	26	26

001T

LC50 Static 48Hr Acute Ame

	MINIMUM %
Mean	98.0538
Minimum	70.
Maximum	100.
Data Count	26

LC50 Static 48Hr Acute Meni

	MINIMUM %
Mean	89.6846
Minimum	51.
Maximum	100.
Data Count	26

Attachment 8

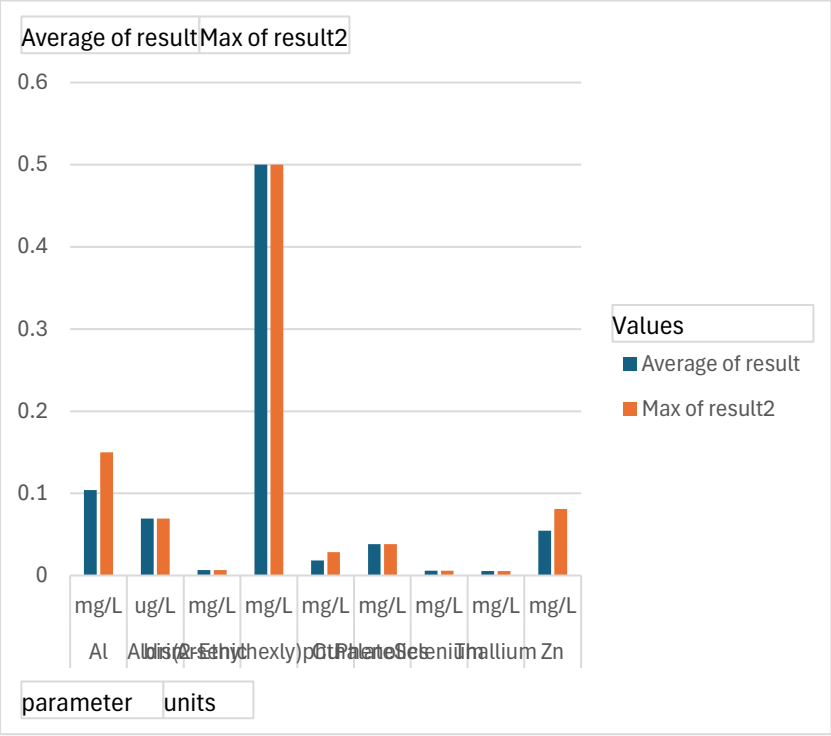
Summary of Priority Pollutant Scan Data
for Calendar Years 2019 through 2024

Attachment 8 - Priority Pollutant Scan Data Quonset 2018-2024

date	parameter	result	units
12/5/2018	Cu	0.0126	mg/L
12/5/2018	Zn	0.0327	mg/L
8/21/2019	Al	0.0623	mg/L
8/21/2019	Arsenic	0.0068	mg/L
8/21/2019	Cu	0.0286	mg/L
8/21/2019	Zn	0.0733	mg/L
9/27/2020	Al	0.150	mg/L
9/27/2020	Cu	0.0264	mg/L
9/27/2020	Thallium	0.0055	mg/L
9/27/2020	Zn	0.0809	mg/L
8/18/2021	Al	0.0648	mg/L
8/18/2021	Cu	0.0139	mg/L
8/18/2021	Zn	0.0489	mg/L
8/3/2022	Al	0.130	mg/L
8/3/2022	Aldrin	0.0692	ug/L
8/3/2022	Cu	0.0162	mg/L
8/3/2022	Selenium	0.00572	mg/L
8/3/2022	Zn	0.0592	mg/L
7/26/2023	Al	0.0898	mg/L
7/26/2023	Cu	0.0149	mg/L
7/26/2023	Phenolics	0.0380	mg/L
7/26/2023	Zn	0.0462	mg/L
7/10/2024	Al	0.127	mg/L
7/10/2024	bis(2-Ethylhexly)phthalate	0.500	mg/L
7/10/2024	Cu	0.0154	mg/L
7/10/2024	Zn	0.0409	mg/L

Attachment 8 - Priority Pollutant Scan Data Quonset 2018-2024

Row Labels	Average of result	Max of result2
Al	**0.103983333**	**0.15**
mg/L	0.103983333	0.15
Aldrin	**0.0692**	**0.0692**
ug/L	0.0692	0.0692
Arsenic	**0.0068**	**0.0068**
mg/L	0.0068	0.0068
bis(2-Ethylhexly)phthalate	**0.5**	**0.5**
mg/L	0.5	0.5
Cu	**0.018285714**	**0.0286**
mg/L	0.018285714	0.0286
Phenolics	**0.038**	**0.038**
mg/L	0.038	0.038
Selenium	**0.00572**	**0.00572**
mg/L	0.00572	0.00572
Thallium	**0.0055**	**0.0055**
mg/L	0.0055	0.0055
Zn	**0.054585714**	**0.0809**
mg/L	0.054585714	0.0809
Grand Total	**0.067662308**	**0.5**



Attachment 9

Comparison of Allowable Limits with Discharge Monitoring Report Data, Priority Pollutant Scan Data, and Permit Application Data

Facility Name: *Quonsett WWTF*
RIPDES Permit #: *RI0100404*
Outfall #: *001A*

NOTE: METALS LIMITS ARE TOTAL METALS

Parameter	CAS #	Concentration Limits (ug/L) Based on WQ Criteria		Antideg. Limits (ug/L)	higher of PPS/Ap data (ug/L) 12/18 - 7/24 // 3/23		Ave. DMR Data (ug/L) 10/18 - 3/31/25		Potential Permit Limits (ug/L)		Reasonable Potential?	
		Daily Max	Monthly Ave	Monthly Ave	Max	Ave	Daily Max	Monthly Ave	Daily Max	Monthly Ave	Daily Max.	Monthly Ave
PRIORITY POLLUTANTS												
TOXIC METALS AND CYANIDE												
ANTIMONY	7440360	No Criteria	102400.00	---	16.00	0.89	---	---	---	102400		
ARSENIC (limits are total recoverable)	7440382	5520.00	224.00	---	6.80	6.80	---	---	5520	224	N	N
ASBESTOS	1332214	No Criteria	No Criteria	---	---	---	---	---	---	---		
BERYLLIUM	7440417	No Criteria	No Criteria	---	---	---	---	---	---	---		
CADMIUM (limits are total recoverable)	7440439	3618.70	1587.48	102.09	---	---	0	0	3618.702616	102.09	N	N
CHROMIUM III (limits are total recoverable)	16065831	No Criteria	No Criteria	---	---	---	---	---	---	---		
CHROMIUM VI (limits are total recoverable)	18540299	99682.90	9033.32	549.52	---	---	---	---	99682.9006	549.52	N	N
COPPER (limits are total recoverable)	7440508	456.31	456.31	168.09	28.60	21.08	19.2	19.2	456.3108434	168.09	N	N
CYANIDE	57125	80.00	80.00	47.255	---	---	0.279	0.214	80	47.255	N	N
LEAD (limits are total recoverable)	7439921	19869.51	1524.46	91.58	3.50	0.37	0.135	0.135	19869.50726	91.58	N	N
MERCURY (limits are total recoverable)	7439976	169.41	24.00	1.35	---	---	---	---	169.4117647	1.35		
NICKEL (limits are total recoverable)	7440020	6640.84	1317.18	94.092	6.10	0.68	0.699	0.699	6640.842727	94.092	N	N
SELENIUM (limits are total recoverable)	7782492	23246.49	11382.77	---	9.30	5.72	---	---	23246.49299	11382.76553	N	N
SILVER (limits are total recoverable)	7440224	200.79	No Criteria	---	---	---	---	---	200.7921176	200.7921176		
THALLIUM	7440280	No Criteria	75.20	---	5.50	5.50	---	---	---	75.2		N
ZINC (limits are total recoverable)	7440666	7610.99	7610.99	946.39	80.90	60.16	58.2	58.2	7610.993658	946.39	N	N
VOLATILE ORGANIC COMPOUNDS												
ACROLEIN	107028	No Criteria	46400.00	---	---	---	---	---	---	46400		
ACRYLONITRILE	107131	No Criteria	400.00	---	---	---	---	---	---	400		
BENZENE	71432	No Criteria	81600.00	---	---	---	---	---	---	81600		
BROMOFORM	75252	No Criteria	224000.00	---	---	---	---	---	---	224000		
CARBON TETRACHLORIDE	56235	No Criteria	2560.00	---	---	---	---	---	---	2560		
CHLOROBENZENE	108907	No Criteria	256000.00	---	---	---	---	---	---	256000		
CHLORODIBROMOMETHANE	124481	No Criteria	20800.00	---	---	---	---	---	---	20800		
CHLOROFORM	67663	No Criteria	752000.00	---	---	---	---	---	---	752000		

DICHLOROBROMOMETHANE	75274	No Criteria	27200.00	---	---	---	---	---	---	27200	
1,2DICHLOROETHANE	107062	No Criteria	59200.00	---	---	---	---	---	---	59200	
1,1DICHLOROETHYLENE	75354	No Criteria	1136000.00	---	---	---	---	---	---	1136000	
1,2DICHLOROPROPANE	78875	No Criteria	24000.00	---	---	---	---	---	---	24000	
1,3DICHLOROPROPYLENE	542756	No Criteria	3360.00	---	---	---	---	---	---	3360	
ETHYLBENZENE	100414	No Criteria	336000.00	---	---	---	---	---	---	336000	
BROMOMETHANE (methyl bromide)	74839	No Criteria	240000.00	---	---	---	---	---	---	240000	
CHLOROMETHANE (methyl chloride)	74873	No Criteria	No Criteria	---	---	---	---	---	---	---	
METHYLENE CHLORIDE	75092	No Criteria	944000.00	160001	---	---	---	---	---	160001	
1,1,2,2TETRACHLOROETHANE	79345	No Criteria	6400.00	---	---	---	---	---	---	6400	
TETRACHLOROETHYLENE	127184	No Criteria	5280.00	886.33	---	---	---	---	---	886.33	
TOLUENE	108883	No Criteria	2400000.00	---	---	---	---	---	---	2400000	
1,2TRANSDICHLOROETHYLENE	156605	No Criteria	1600000.00	---	---	---	---	---	---	1600000	
1,1,1TRICHLOROETHANE	71556	No Criteria	No Criteria	---	---	---	---	---	---	---	
1,1,2TRICHLOROETHANE	79005	No Criteria	25600.00	---	---	---	---	---	---	25600	
TRICHLOROETHYLENE	79016	No Criteria	48000.00	8114.7	---	---	---	---	---	8114.7	
VINYL CHLORIDE	75014	No Criteria	384.00	---	---	---	---	---	---	384	
ACID ORGANIC COMPOUNDS											
2CHLOROPHENOL	95578	No Criteria	24000.00	---	---	---	---	---	---	24000	
2,4DICHLOROPHENOL	120832	No Criteria	46400.00	---	---	---	---	---	---	46400	
2,4DIMETHYLPHENOL	105679	No Criteria	136000.00	---	---	---	---	---	---	136000	
4,6DINITRO2METHYL PHENOL	534521	No Criteria	44800.00	---	---	---	---	---	---	44800	
2,4DINITROPHENOL	51285	No Criteria	848000.00	---	---	---	---	---	---	848000	
4NITROPHENOL	88755	No Criteria	No Criteria	---	---	---	---	---	---	---	
PENTACHLOROPHENOL	87865	1040.00	1040.00	---	3.20	0.18	---	---	1040	1040	
PHENOL	108952	No Criteria	272000000.00	---	1.04	0.06	---	---	---	272000000	N
2,4,6TRICHLOROPHENOL	88062	No Criteria	3840.00	---	---	---	---	---	---	3840	
BASE NEUTRAL COMPOUNDS											
ACENAPHTHENE	83329	No Criteria	158400.00	---	---	---	---	---	---	158400	
ANTHRACENE	120127	No Criteria	6400000.00	---	---	---	---	---	---	6400000	
BENZIDINE	92875	No Criteria	0.32	---	---	---	---	---	---	0.32	
POLYCYCLIC AROMATIC HYDROCARBONS		No Criteria	28.80	---	---	---	---	---	---	28.8	
BIS(2CHLOROETHYL)ETHER	111444	No Criteria	848.00	---	---	---	---	---	---	848	
BIS(2CHLOROISOPROPYL)ETHER	108601	No Criteria	10400000.00	---	---	---	---	---	---	10400000	
BIS(2ETHYLHEXYL)PHTHALATE	117817	No Criteria	3520.00	---	500	500	---	---	---	3520	N
BUTYL BENZYL PHTHALATE	85687	No Criteria	304000.00	---	---	---	---	---	---	304000	
2CHLORONAPHTHALENE	91587	No Criteria	256000.00	---	---	---	---	---	---	256000	

1,2DICHLOROBENZENE	95501	No Criteria	208000.00	---	---	---	---	---	---	208000		
1,3DICHLOROBENZENE	541731	No Criteria	153600.00	---	---	---	---	---	---	153600		
1,4DICHLOROBENZENE	106467	No Criteria	30400.00	---	---	---	---	---	---	30400		
3,3DICHLOROBENZIDENE	91941	No Criteria	44.80	---	---	---	---	---	---	44.8		
DIETHYL PHTHALATE	84662	No Criteria	7040000.00	---	---	---	---	---	---	7040000		
DIMETHYL PHTHALATE	131113	No Criteria	176000000.00	---	---	---	---	---	---	176000000		
DInBUTYL PHTHALATE	84742	No Criteria	720000.00	---	---	---	---	---	---	720000		
2,4DINITROTOLUENE	121142	No Criteria	5440.00	---	---	---	---	---	---	5440		
1,2DIPHENYLHYDRAZINE	122667	No Criteria	320.00	---	---	---	---	---	---	320		
FLUORANTHENE	206440	No Criteria	22400.00	---	---	---	---	---	---	22400		
FLUORENE	86737	No Criteria	848000.00	---	---	---	---	---	---	848000		
HEXACHLOROBENZENE	118741	No Criteria	0.46	---	---	---	---	---	---	0.464		
HEXACHLOROBUTADIENE	87683	No Criteria	28800.00	---	---	---	---	---	---	28800		
HEXACHLOROCYCLOPENTADIENE	77474	No Criteria	176000.00	---	---	---	---	---	---	176000		
HEXACHLOROETHANE	67721	No Criteria	5280.00	---	---	---	---	---	---	5280		
ISOPHORONE	78591	No Criteria	1536000.00	---	---	---	---	---	---	1536000		
NAPHTHALENE	91203	No Criteria	No Criteria	---	---	---	---	---	---	---		
NITROBENZENE	98953	No Criteria	110400.00	---	---	---	---	---	---	110400		
NNITROSODIMETHYLAMINE	62759	No Criteria	4800.00	---	---	---	---	---	---	4800		
NNITROSODINPROPYLAMINE	621647	No Criteria	816.00	---	---	---	---	---	---	816		
NNITROSODIPHENYLAMINE	86306	No Criteria	9600.00	---	---	---	---	---	---	9600		
PYRENE	129000	No Criteria	640000.00	---	---	---	---	---	---	640000		
1,2,4trichlorobenzene	120821	No Criteria	11200.00	---	---	---	---	---	---	11200		
PESTICIDES/PCBs												
ALDRIN	309002	104.00	0.08	---	0.0692	0.0692	---	---	104	0.08		Y
Alpha BHC	319846	No Criteria	7.84	---	---	---	---	---	---	7.84		
Beta BHC	319857	No Criteria	27.20	---	---	---	---	---	---	27.2		
Gamma BHC (Lindane)	58899	12.80	12.80	---	---	---	---	---	12.8	12.8		
CHLORDANE	57749	7.20	0.64	---	---	---	---	---	7.2	0.64		
4,4DDT	50293	10.40	0.16	---	---	---	---	---	10.4	0.16		
4,4DDE	72559	No Criteria	0.35	---	---	---	---	---	---	0.352		
4,4DDD	72548	No Criteria	0.50	---	---	---	---	---	---	0.496		
DIELDRIN	60571	56.80	0.09	---	---	---	---	---	56.8	0.0864		
ENDOSULFAN (alpha)	959988	2.72	1.39	---	---	---	---	---	2.72	1.392		
ENDOSULFAN (beta)	33213659	2.72	1.39	---	---	---	---	---	2.72	1.392		
ENDOSULFAN (sulfate)	1031078	No Criteria	14240.00	---	---	---	---	---	---	14240		
ENDRIN	72208	2.96	0.37	---	---	---	---	---	2.96	0.368		

ENDRIN ALDEHYDE	7421934	No Criteria	48.00	---	---	---	---	---	---	48		
HEPTACHLOR	76448	4.24	0.13	---	---	---	---	---	4.24	0.1264		
HEPTACHLOR EPOXIDE	1024573	4.24	0.06	---	---	---	---	---	4.24	0.0624		
POLYCHLORINATED BIPHENYLS3	1336363	No Criteria	0.10	---	---	---	---	---	---	0.1024		
2,3,7,8TCDD (Dioxin)	1746016	No Criteria	0.00	---	---	---	---	---	---	0.00000816		
TOXAPHENE	8001352	16.80	0.03	---	---	---	---	---	16.8	0.032		
TRIBUTYLTIN		33.60	1.18						33.6	1.184		
NON PRIORITY POLLUTANTS:												
OTHER SUBSTANCES												
ALUMINUM (limits are total recoverable)	7429905	No Criteria	No Criteria	---	150	104	93.3	93.3	---	---	NA	NA
AMMONIA (winter)	7664417	1380960.00	407712.00	---	18200	16000	---	---	1380960	407712		
AMMONIA (summer)		480048.00	144672.00	---	18200	16000	---	---	480048	144672		
4BROMOPHENYL PHENYL ETHER	16887006	No Criteria	No Criteria	---	---	---	---	---	---	---		
CHLORIDE	7782505	No Criteria	No Criteria						---	---		
CHLORINE		1300.00	1300.00	---	1200	850	1123	889	1300	1300	Y	Y
4CHLORO2METHYLPHENOL		No Criteria	No Criteria	---	---	---	---	---	---	---		
1CHLORONAPHTHALENE	106489	No Criteria	No Criteria	---	---	---	---	---	---	---		
4CHLOROPHENOL		No Criteria	No Criteria	---	---	---	---	---	---	---		
2,4DICHLORO6METHYLPHENOL		No Criteria	No Criteria	---	---	---	---	---	---	---		
1,1DICHLOROPROPANE	142289	No Criteria	No Criteria	---	---	---	---	---	---	---		
1,3DICHLOROPROPANE		No Criteria	No Criteria	---	---	---	---	---	---	---		
2,3DINITROTOLUENE		No Criteria	No Criteria	---	---	---	---	---	---	---		
2,4DINITRO6METHYL PHENOL	7439896	No Criteria	No Criteria	---	---	---	---	---	---	---		
IRON	608935	No Criteria	No Criteria						---	---		
pentachlorobenzene		No Criteria	No Criteria	---	---	---	---	---	---	---		
PENTACHLOROETHANE		No Criteria	No Criteria	---	---	---	---	---	---	---		
1,2,3,5tetrachlorobenzene	630206	No Criteria	No Criteria	---	---	---	---	---	---	---		
1,1,1,2TETRACHLOROETHANE	58902	No Criteria	No Criteria	---	---	---	---	---	---	---		
2,3,4,6TETRACHLOROPHENOL		No Criteria	No Criteria	---	---	---	---	---	---	---		
2,3,5,6TETRACHLOROPHENOL	95954	No Criteria	No Criteria	---	---	---	---	---	---	---		
2,4,5TRICHLOROPHENOL	88062	No Criteria	No Criteria	---	---	---	---	---	---	---		
2,4,6TRINITROPHENOL	1330207	No Criteria	No Criteria	---	---	---	---	---	---	---		
XYLENE		No Criteria	No Criteria						---	---		

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: October 14, 2025

PUBLIC NOTICE NUMBER: PN 25-06

DRAFT RIPDES PERMITS

RIPDES PERMIT NUMBER: RI0100404

NAME AND MAILING ADDRESS OF APPLICANT:
Quonset Development Corporation
95 Cripe Street
North Kingstown, Rhode Island 02852

NAME AND ADDRESS OF FACILITY WHERE DISCHARGE OCCURS:
Quonset Wastewater Treatment Facility
150 Zarbo Ave.
North Kingstown, Rhode Island 02852

RECEIVING WATER: West Passage (RI0007027E-03C)

RECEIVING WATER CLASSIFICATION: SB1

The facility, which is the source of the wastewater discharge, is located at the Quonset Development Corporation in North Kingstown and is engaged in the treatment of sanitary and industrial sewage contributed by the Quonset Point industrial park and the Town of North Kingstown. The facility has reapplied to the Rhode Island Department of Environmental Management (DEM) for reissuance of its permit to discharge from the wastewater treatment plant, which uses the following equipment and processes: coarse screening, grit removal, primary settling, rotating biological contactors, secondary settling, and chlorination. The discharge of treated effluent is made to the West Passage of Narragansett Bay through outfall 001A. The permit includes limits to ensure that the discharge will not cause a water quality violation.

RIPDES PERMIT NUMBER: RI0100056

NAME AND MAILING ADDRESS OF APPLICANT:

Town of Warren
514 Main Street
Warren, RI 02885

NAME AND ADDRESS OF FACILITY WHERE DISCHARGE OCCURS:

Warren Wastewater Treatment Facility
427 Water Street
Warren, RI 02885

RECEIVING WATER: Warren River (RI0007023E-01A)

RECEIVING WATER CLASSIFICATION: SB1

The facility which is the source of the wastewater discharge is located at the Warren Wastewater Treatment Facility in the Town of Warren and is engaged in the treatment of domestic and industrial sewage. The facility has reapplied to the Rhode Island Department of Environmental Management (DEM) for the reissuance of a Rhode Island Discharge Elimination System (RIPDES) Permit to discharge into the designated receiving water. The wastewater treatment plant uses the following treatment technology and processes: course screening, grit removal, comminution, primary settling, aeration, secondary flocculation and clarification, chlorination, and dechlorination. The discharge of treated effluent is made to the Warren River through outfall 001A. The permit includes limits to ensure that the discharge will not cause a water quality violation.

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 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 fact sheet and permit development document which is available as noted below.

FURTHER INFORMATION:

A fact sheet (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:

Samuel Kaplan, P.E., Environmental Engineer II
Rhode Island Department of Environmental Management
Office of Water Resources
Permits Section
235 Promenade Street
Providence, Rhode Island 02908-5767
(401) 537-4240

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 AM and 4:00 PM, 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 Samuel Kaplan, P.E. at the address 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 Friday, November 14 at 4:00 PM, a public hearing will be held at the following time and place:

6:00 PM Thursday, November 20, 2025
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 Samuel Kaplan or RI Relay 711 by 4:00 PM on Friday, November 14, 2025 so that 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 PM on Friday, November 21, 2025.

If, during the public comment period, significant new questions are raised concerning the permit, 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-150-10-1.41 of the Regulations of the Rhode Island Pollutant Discharge Elimination System. The public comment period is from Tuesday, October 14, 2025 to Friday, November 21, 2025. 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 of the Rhode Island Pollutant Discharge Elimination System.

06 Oct 2025

Date

Heidi Travers

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