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

Town of Cumberland Water Department
98 Nate Whipple Highway
Cumberland, RI 02864

is authorized to discharge from the following facility

Sneech Pond Water Treatment Facility
76 Nate Whipple Highway
Cumberland, RI 02864

to receiving waters named

Sneech Pond

in accordance with the 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 27, 2011.

This permit consists of ten (10) pages in Part I including effluent limitations, monitoring requirements, etc. and ten (10) pages in Part II including General Conditions.

Signed this _____ day of _____ 2019

DRAFT

_____
Angelo S. Liberti, P.E., Administrator of Surface Water Protection
Office of Water Resources
Rhode Island Department of Environmental Management
Providence, Rhode Island

PART I

A. **EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

1. During the period beginning on the effective date of this permit and lasting through permit expiration the permittee is authorized to discharge from outfall serial number 001 (Sedimentation Basin Decant Discharge). 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 *(Average)	Maximum Daily *(Maximum)	Measurement Frequency	Sample Type
Flow	--- MGD	--- MGD				Continuous	Estimate
TSS	--- lb/day	--- lb/day	30 mg/l		50 mg/l	Once/Discharge	24-Hr. Composite
Turbidity					(--- NTU)	Once/Discharge	4 Grabs[1]
pH			(6.5 S.U.)		(9.0 S.U.)	Once/Discharge	4 Grabs[1]
Total Residual Chlorine			11 ug/l[2]		19 ug/l[2]	Once/Discharge	4 Grabs[1]
Total Aluminum[3]			70 ug/l		600 ug/l	Once/Discharge	24-Hr. Composite
Total Iron			240 ug/l		--- ug/l	Once/Discharge	24-Hr. Composite

[1] Compliance with these limitations shall be determined by taking a minimum of four (4) grab samples equally spaced over the course of the discharge. The Maximum Turbidity and pH values to be reported are the highest individual measurement obtained during the monitoring period. The Minimum pH value to be reported is the lowest individual measurement obtained during the monitoring period. For Total Residual Chlorine, grab samples obtained during a given calendar day shall be averaged to obtain a single daily value for each calendar day. The Maximum Daily Total Residual Chlorine value to be reported is the highest of the daily values obtained during the reporting period. The Average Monthly Total Residual Chlorine value to be reported is the average of all daily values obtained during the reporting period.

[2]The following methods may be used to analyze the Total Residual Chlorine grab samples: (1) Low Level Amperometric Titration, Standard Methods (18th Edition) No. 4500-Cl E; or (2) DPD Spectrophotometric, EPA No. 330.5 or Standard Methods (18th Edition) No. 4500-Cl G. The limit at which compliance/noncompliance determinations will be based is the Quantitation Limit which is defined as 20 ug/l for TRC. These values may be reduced by permit modification as more sensitive methods are approved by EPA and the State.

[3]Sampling for Total Aluminum is only required during months in which Aluminum based coagulation chemicals are used in the water treatment process. For all other periods sampling is not required.

--- 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/Maximum for the reporting period rather than Average Monthly/Maximum Daily.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following locations: Outfall 001 (Sedimentation Basin Decant Discharge) as specified in the process flow diagram in Attachment A.

PART I

A. **EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

2. During the period beginning on the effective date of this permit and lasting through permit expiration the permittee is authorized to discharge from outfall serial number 001 (Sedimentation Basin Decant Discharge). 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 *(Average)	Maximum Daily *(Maximum)	Measurement Frequency	Sample Type
Beryllium			0.136 ug/L[1]		6 ug/L	Once/Discharge	24-Hour Composite
Chromium III			22.15 ug/L			Once/Discharge	24-Hour Composite
Copper			2.28 ug/L		3.03 ug/L	Once/Discharge	24-Hour Composite
Lead			0.44 ug/L		11.18 ug/L	Once/Discharge	24-Hour Composite
Zinc			29.61 ug/L		29.61 ug/L	Once/Discharge	24-Hour Composite

[1]The limit at which compliance/noncompliance determinations will be based is the Quantitation Limit which is defined as 0.2 ug/l for Beryllium. These values may be reduced by permit modification as more sensitive methods are approved by EPA and the State.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following locations: Outfall 001 (Sedimentation Basin Decant Discharge) as specified in the process flow diagram in Attachment A.

PART I

A. **EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

3. During the period beginning on the effective date of this permit and lasting through permit expiration the permittee is authorized to discharge from outfall serial number 002 (Filter Backwash Discharge). 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 *(Average)	Maximum Daily *(Maximum)	Measurement Frequency	Sample Type
Flow	0.042 MGD	--- MGD				Continuous	Recorder
TSS	10.5 lb/day	17.5 lb/day	30 mg/l		50 mg/l	2/Month	24-Hr. Composite
Turbidity			--- NTU		--- NTU	2/Month	Grab
pH			(6.5 S.U.)		(9.0 S.U.)	2/Month	Grab
Total Residual Chlorine			11 ug/l[1]		19 ug/l[1]	2/Month	Grab
Total Aluminum[2]			70 ug/l		600 ug/l	2/Month	24-Hr. Composite
Total Iron			240 ug/l		--- ug/l	2/Month	24-Hr. Composite

[1]The following methods may be used to analyze the Total Residual Chlorine grab samples: (1) Low Level Amperometric Titration, Standard Methods (18th Edition) No. 4500-Cl E; or (2) DPD Spectrophotometric, EPA No. 330.5 or Standard Methods (18th Edition) No. 4500-Cl G. The limit at which compliance/noncompliance determinations will be based is the Quantitation Limit which is defined as 20 ug/l for TRC. These values may be reduced by permit modification as more sensitive methods are approved by EPA and the State.

[2]Sampling for Total Aluminum is only required during months in which Aluminum based coagulation chemicals are used in the water treatment process. For all other periods sampling is not required.

--- 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/Maximum for the reporting period rather than Average Monthly/Maximum Daily.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location: Outfalls 002 (Filter Backwash Discharge) as specified in the process flow diagram in Attachment A.

PART I

A. **EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

4. During the period beginning on the effective date of this permit and lasting through permit expiration the permittee is authorized to discharge from outfall serial number 002 (Filter Backwash Discharge). 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 *(Average)	Maximum Daily *(Maximum)	Measurement Frequency	Sample Type
Beryllium			--- ug/L		--- ug/L	Once/Quarter	24-Hour Composite
Chromium III			--- ug/L		--- ug/L	Once/Quarter	24-Hour Composite
Copper			--- ug/L		--- ug/L	Once/Quarter	24-Hour Composite
Lead			--- ug/L		--- ug/L	Once/Quarter	24-Hour Composite
Zinc			--- ug/L		--- ug/L	Once/Quarter	24-Hour Composite

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

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location: Outfalls 002 (Filter Backwash Discharge) as specified in the process flow diagram in Attachment A.

5. The pH of the effluent must be in the range of 6.5 - 9.0 s.u.

6. The discharge shall not cause visible discoloration of the receiving waters.

7. The effluent shall contain neither a visible oil sheen, foam, nor floating solids at any time.

8. The turbidity of the receiving water shall not exceed 5 NTU over natural background.

9. Solids, sludges, or biosolids removed in the course of treatment or control of wastewaters, shall be properly disposed of in compliance with applicable state laws, regulations, and permit requirements, and in a manner such as to prevent any pollutant from such materials from entering the waters of the state.

10. Within six (6) months of the effective date of this permit, the permittee is required to update and implement a comprehensive Residuals Management Plan and submit a copy of this plan to the DEM. The components of the Residuals Management Plan must include the following:

    a. Characterization of the quantity and quality of the residuals generated by the facility;

    b. Determination of the appropriate regulatory requirements;

    c. Identification of feasible disposal options;

    d. Selection of appropriate residuals processing/treatment technologies and development of a residuals management strategy that meets the regulatory goals established for the water treatment facility;

    e. Development of best management practices which at a minimum include the following:

        1) An evaluation of the water treatment residuals storage capacity within each residuals treatment unit (e.g., the rapid mix basin, the flocculation basin, and the sedimentation basin) and an identification of the criteria which will serve as a trigger to determine when each treatment unit needs to be pulled offline in order to remove solids to avoid potential permit violations;

        2) Procedures and periodic evaluation techniques that will be used to gauge the remaining storage capacity of residuals treatment units;

        3) Maintenance procedures used to deactivate and prepare treatment units for sludge removal. These maintenance procedures must identify the appropriate steps necessary to temporarily lower the water level in the treatment unit, remove settled solids, and restore the flow through the treatment unit in such a way that degradation of the receiving waters and permit violations will be prevented;

    f. A requirement that all critical activities associated with the operations and maintenance of the water treatment plant residuals treatment units be documented and copies of such documentation be kept on site at all times throughout the effective life of the permit;

    g. A requirement to review the Residuals Management Plan (at a minimum) on a yearly basis, which also requires the Plan to be updated as necessary. A copy of the Residuals Management Plan and records of the annual reviews must be available on site at all times throughout the effective life of the permit;

11. The DEM may notify the permittee at any time that the Residuals Management Plan is deficient or does not meet one or more of the requirements of this permit. After such notification, the permittee shall make changes to the Residuals Management Plan and submit to the DEM a written certification that the requested changes have been made. Unless otherwise provided by the DEM, the permittee shall have thirty (30) days after notification to make the necessary changes. The permittee shall immediately amend the Residuals Management Plan if it proves to be ineffective in achieving the general objectives of controlling pollutants in discharges associated with the water treatment facility. Changes must be noted and submitted to the DEM within thirty (30) days of amending the Residuals Management Plan. Amendments to the Residuals Management Plan may be reviewed by the DEM in the same manner specified above.

12. This permit authorizes the use of aluminum or ferric based water treatment chemicals as primary coagulation agents. The permittee must notify the DEM and request a permit modification prior to using any other coagulation agents. Sampling for Total Aluminum is only required during months in which aluminum-based compounds are used as part of the water treatment process. During all other periods sampling is not required.

13. The permittee shall analyze its effluent from outfalls 001 and 002 for the EPA Priority Pollutants as listed in 40 CFR 122, Appendix D, Tables II and III and submit the results to the DEM at least 180 days prior to permit expiration with the permit reapplication. 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.

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

    a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":

        (1) One hundred micrograms per liter (100 ug/l);

        (2) Two hundred micrograms per liter (200 ug/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 ug/l) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitro-phenol; and one milligram per liter (1 mg/l) for antimony;

        (3) Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 C.F.R. s122.21(g)(7); or

        (4) Any other notification level established by the Director in accordance with 40 C.F.R. s122.44(f) and Rhode Island Regulations.

    b. That any activity has occurred or will occur which would result in the discharge, on a non-routine or infrequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":

        (1) Five hundred micrograms per liter (500 ug/l);

        (2) One milligram per liter (1 mg/l) for antimony;

(3) Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 C.F.R s122.21(g)(7); or

(4) Any other notification level established by the Director in accordance with 40 C.F.R. s122.44(f) and Rhode Island Regulations.

c. That they have begun or expect to begin to use or manufacture as an intermediate or final product or by-product any toxic pollutant which was not reported in the permit application.

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

B. 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 analyses of parameters under this permit. The permittee shall assure that all testing required by this permit, is performed in conformance with methods listed in 40 CFR 136. In accordance with 40 CFR 136, EPA approved analysis techniques, quality assurance procedures and quality control procedures shall be followed for all reports required to be submitted under the Rhode Island Pollutant Discharge Elimination System (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).

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 136, Appendix B.

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

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

2. results reported as less than the MDL shall be included as zeros in accordance with the DEM's DMR Instructions, provided that all appropriate EPA approved methods were followed.

Therefore, all sample results shall be reported as: an actual value, "could not be analyzed", or zero. The effluent or sludge specific MDL must be calculated using the methods outlined in 40 CFR 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.

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 ug/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 ug/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 ug/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 ug/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 ug/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

OTHER TOXIC POLLUTANTS

	MDL ug/l (ppb)
Antimony, Total	3.0
Arsenic, Total	1.0
Beryllium, Total	0.2
Cadmium, Total	0.1
Chromium, Total	1.0
Chromium, Hexavalent	20.0
Copper, Total	1.0
Iron, Total	50
Lead, Total	0.2
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	10.0
Phosphorus,Total	10
Phenols, Total	50.0
TCDD	**
MTBE (Methyl Tert Butyl Ether)	1.0

* Polynuclear Aromatic Hydrocarbons
** No Rhode Island Department of Environmental Management (RIDEM) 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.

C. MONITORING AND REPORTING

1. Monitoring

All monitoring required by this permit shall be done in accordance with sampling and analytical testing procedures specified in 40 CFR Part 136 unless other procedures are explicitly required in the permit.

2. Reporting

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

A. 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.

B. 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:

- DMR Cover Letters
- Below Detection Limit summary tables

C. 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
B. Notice of unauthorized discharges
C. Priority Pollutant Scan Results per Part I.A.13
D. Residuals Management Plan submittals required per Part I.A.11

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

D. Verbal Reports and Verbal Notifications

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

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

STATEMENT OF BASIS

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

RIPDES PERMIT NO. **RI0023884**

NAME AND ADDRESS OF APPLICANT:

Town of Cumberland Water Department
98 Nate Whipple Highway
Cumberland, RI 02864

NAME AND ADDRESS OF FACILITY WHERE DISCHARGE OCCURS:

Sneech Pond Water Treatment Facility
76 Nate Whipple Highway
Cumberland, RI 02864

RECEIVING WATER: **Sneech Pond** (water body ID #: **RI0001005L-01**)

CLASSIFICATION: **AA**

I. Proposed Action, Type of Facility, and Discharge Location

The above-named applicant has reapplied to the Rhode Island Department of Environmental Management (DEM) for reissuance of a RIPDES permit to discharge into the designated receiving water. The facility is involved in the production of potable water for the northern section of the Town of Cumberland and has been in operation for approximately 60 years discharging into Sneech Pond. This permit authorizes the discharge from the facility's automatic backwashing filters and its sedimentation basin and maintains appropriate permit limits to ensure that there will not be any adverse impacts to Sneech Pond.

The water treatment plant has two (2) separate outfalls to Sneech Pond. Outfall 001 is used to drain the clear "supernatant" water from the facility's sedimentation basin as part of its solids removal process. Approximately once every three (3) months the supernatant is drained from the sedimentation basin through outfall 001. Once the supernatant has been drained, the Cumberland Water Department has an outside contractor remove the remaining solid slurry using a vacuum truck for off-site disposal. The total volume of supernatant discharged is approximately 119,000 gallons and the discharge lasts roughly eight (8) hours. Outfall 002 is the routine discharge of filter backwash water from the automatic backwashing filters. This discharge occurs for approximately one (1) hour every four (4) hours with a total daily discharge of approximately 42,000 gallons/day.

II. Description of Discharge

A quantitative description of the discharge in terms of significant effluent parameters based upon DMR data from January 2014 to December 2018 is shown in Attachment A.

III. Permit Limitations and Conditions

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

DEM first issued a RIPDES permit for the Sneech Pond Water Treatment facility on July 27, 2011. On January 27, 2012, the Town and DEM entered into Consent Agreement RIA-414 to evaluate alternatives which would bring the facility into compliance with its RIPDES permit effluent limits. On April 4, 2014, the Town and DEM entered into a revised consent agreement which contained a 36-month timeframe for the facility to switch to a well-based drinking water system or eliminate the effluent discharge from the facility by April 30, 2017. In January of 2018, the Town requested an extension to the deadline for the consent agreement. On June 14, 2018, DEM extended the deadline for the elimination of the discharge to July 31, 2019. The Town and DEM met on March 8, 2019, and the outcome of the meeting was that the Town was behind on the schedule in the Consent Agreement for its well development work. Therefore, DEM would proceed with the reissuance of the facility's RIPDES permit.

Based upon a comparison of historical effluent data, permit application data, and priority pollutant scan data to potential permit limits, the water treatment plant has not been able to meet some of the limits that have been assigned or maintained, specifically limits for outfall 001 for Beryllium, Chromium III, Copper, Lead, Zinc, Total Residual Chlorine (TRC), Iron, and Aluminum, and limits for outfall 002 for Total Residual Chlorine (TRC), Aluminum, and Iron. As a result, the DEM is willing to amend the existing consent agreement (RIPDES Consent Agreement RIA-414), subsequent to the reissuance of the permit, to include interim limits for these pollutants and an updated schedule to eliminate the discharge by switching to a well-based system.

IV. Permit Basis and Explanation of Effluent Limitation Derivation

Facility Information

The Sneech Pond Water Treatment Facility (WTF) is a water supplier that serves the northern portion of the Town of Cumberland. Under the current treatment process the plant treats raw surface water in a series of steps. Raw water is first pumped from Sneech Pond and dosed with sodium hypochlorite and liquid aluminum sulfate. The combined raw water, aluminum sulfate, and sodium hypochlorite are pumped into a rapid mix basin and allowed to mix completely. Water then exits the rapid mix basin and enters a flocculation basin where a solid "floc" is formed. The water then enters a single sedimentation basin to allow the "floc" to settle out. After the sedimentation basin, water is passed through the automatic backwashing filters to remove any remaining fine solids. Finally, after being treated through the filters, the water is dosed with sodium hypochlorite for disinfection and stored in the clearwell prior to discharge to the distribution system.

As previously indicated, approximately once every three (3) months the supernatant is drained from the sedimentation basin through outfall 001. The total volume discharged each time the supernatant is drained is roughly 119,000 gallons. In addition, as was also previously indicated, for approximately one (1) hour every four (4) hours the automatic backwashing filters backwash. The average daily volume discharge from the filters through outfall 002 is roughly 42,000 gallons. Solids that are settled out in the sedimentation basin are disposed of off-site. The WTF's process diagram is included in Attachment B.

Receiving Water

The water body that receives the discharge from the Sneech Pond treatment plant is described as Sneech Pond is designated as Water Use Classification "AA". The water body identification # for this water body is RI0001005L-01. The water body is located in Cumberland and is classified as a Class AA water body according to the Rhode Island Water Quality Regulations (250-RICR-150-05) Part 1.25. Class AA waters are designated as a source of public drinking water supply (PDWS) or as tributary waters within a public drinking water supply watershed for primary and secondary contact recreational activities and for fish and wildlife habitat. These waters shall have excellent aesthetic value. Sneech Pond is currently not meeting Rhode Island Water Quality Standards because it is listed as impaired for Non-Native Aquatic Plants on the DEM's 2016 303(d) List of Impaired Waters (dated March 2018).

Permit Limits

Development of RIPDES permit limitations is a multi-step process consisting of the following steps: identifying applicable technology-based limits; calculating allowable water-quality based discharge levels based on in stream criteria, background data and available dilution; establishing Best Professional Judgment (BPJ) limits in accordance with Section 402 of the CWA; and assigning the most stringent as the final discharge limitations.

Water quality criteria are comprised of numeric and narrative criteria. Numeric criteria are scientifically derived ambient concentrations developed by EPA or States for various pollutants of concern to protect human health and aquatic life. Narrative criteria are statements that describe the desired water quality goal. A technology-based limit is a numeric limit, which is determined by examining the capability of a treatment process to reduce or eliminate pollutants.

The Rhode Island Water Quality Regulations (250-RICR-150-05) Part 1.10.C describes the flows used to determine compliance with the aquatic life criteria, specifying that the design flow to be utilized for aquatic life criteria shall not be exceeded at or above the lowest average seven consecutive day low flow with an average recurrence frequency of once in ten years (7Q10). Because the discharge is to a pond a dilution factor of one (1) was used in the determination of water quality-based discharge limits. This assumption was made based on the fact that the 7Q10 flow for a pond is zero.

Technology-Based Effluent Limits

There are no Federal Effluent Limitation Guidelines (ELGs) that apply to this facility. Therefore, in the absence of technology-based ELGs, the DEM established permit limits based on water quality and BPJ.

Water Quality Based Permit Limitations

The allowable effluent limitations were established based on the freshwater acute and chronic aquatic life criteria and human health criteria specified in the Rhode Island Water Quality Regulations (250-RICR-150-05) Part 1.10.D. as amended, using 80% allocation when no background data was available and 90% allocation when background data is available. Since any background data that is available would be impacted by the water treatment facility's discharge, the allowable water quality-based discharge levels are set equal to 80% of the water quality criteria for freshwaters (for aquatic life criteria) and for water and aquatic organism consumption (for human health criteria) as listed in the Rhode Island Water Quality Regulations (250-RICR-150-05) Part 1.26.J. 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 the ingestion of aquatic organisms. The more stringent of the two criteria was then used in establishing allowable effluent limitations.

For water quality-based limitations when the background concentration is unknown or impacted by uncontrolled discharges the allowable discharge limits are calculated as follows:

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

In accordance with 40 CFR 122.44(d)(1)(iii), water quality based effluent limitations are only required for those pollutants in the discharge that have the reasonable potential to cause or contribute to the exceedence of in stream criteria.

Total Aluminum

Based on the RIPDES evaluation it has been determined that limits for Total Aluminum are necessary given the fact that the discharge has demonstrated reasonable potential to violate water quality criteria established for Total Aluminum. Discharges from outfalls 001 and 002 have reasonable potential to violate water quality criteria for aluminum due to the facility's use of aluminum sulfate. Therefore total aluminum limitations have been maintained. The water quality-based discharge limitations for freshwaters with a dilution factor equal to one (1) are as follows: Monthly Average Limit = 70 ug/L or 0.07 mg/l, and Daily Maximum Limit = 600 ug/l or 0.6 mg/L. Sampling for aluminum is only required during months in which aluminum-based compounds are used as part of the water treatment process. During all other periods sampling is not required. Comparison of historical Total Aluminum effluent values and 2016 RIPDES permit application Total Aluminum values to potential permit limits for Total Aluminum indicated that the facility will not be able to meet its water quality-based effluent limits, therefore, a Consent Agreement will be required for Total Aluminum for outfalls 001 and 002.

Total Iron

Total Iron limits are being maintained because the facility has demonstrated reasonable potential to exceed its existing permit limits for Total Iron based on Priority Pollutant Scan data submitted by the facility. Those existing Total Iron limits are water quality-based discharge limits for freshwaters with a dilution factor equal to one (1): a Monthly Average Limit of 240 ug/L or 0.240 mg/L. These limits are being implemented at both outfalls. Note that this limit has been adjusted downward to reflect the permit limit calculated based on the Rhode Island Water Quality Regulations' (250-RICR-150-05) Human Health Criteria. Due to the existence of reasonable potential for Iron exceedances, Iron monitoring is required each month. Comparing the Priority Pollutant Scan value for Iron and metals data received from subsequent emails to the permit limit for Iron indicated that the facility will not be able to meet the monthly average permit limit for outfalls 001 and 002, therefore, a Consent Agreement will be required for Total Iron for outfalls 001 and 002.

Total Residual Chlorine

Total Residual Chlorine (TRC) limits have been maintained in this permit due to the fact that the WTF chlorinates its drinking water and, therefore, there is reasonable potential for the discharge to exceed water quality criteria limits for TRC. When calculating TRC limits 100% allocation of TRC was used due to the fact that chlorine is not expected to be found in ambient water and it is a non-conservative pollutant. Therefore, the permit limit is calculated using the following equation:

$$Limit_1 = (DF) * (Criteria) * (100\%)$$

Based on the above-mentioned equation, limits for chlorine were calculated as: Monthly Average Limit = 11 ug/l and Maximum Daily Limit = 19 ug/L. However, since these limits are below the

concentration that can be reliable and accurately measured, the limit at which compliance/noncompliance determinations will be based is the Quantitation Limit which is defined as 20 ug/L for TRC. These values may be reduced by permit modification as more sensitive methods are approved by EPA and the State. Based on the RIPDES evaluation it has been determined that limits for TRC are necessary given the fact that the discharge has demonstrated reasonable potential to violate water quality criteria established for TRC. The above-mentioned limitations have been maintained at outfalls 001 and 002. Comparison of historical TRC effluent values and 2016 RIPDES permit application TRC values to potential permit limits for those parameters indicated that the facility will not be able to meet its water quality-based effluent limits for TRC, therefore, a Consent Agreement will be required for TRC for outfalls 001 and 002.

Metals

A December 2016 Priority Pollutant Scan submitted by the facility indicated that the discharge from outfall 001 contained Beryllium, Chromium (III), Copper, Lead, and Zinc which were present at levels that indicated reasonable potential for water quality exceedances for these parameters. Comparison of Priority Pollutant Scan values for Beryllium, Chromium (III), Copper, Lead, and Zinc with potential permit limits for those parameters indicated that the facility will not be able to meet its water quality-based limits for those parameters, therefore a Consent Agreement will be required for those parameters for outfall 001.

In addition to the Priority Pollutant Scan data, the facility submitted metals sampling data for Beryllium, Chromium (III), Copper, Lead, and Zinc for both outfalls in September of 2019. The data for these five parameters for both outfalls was not tested using sufficiently sensitive method, therefore it did not establish that these metals were not present at either outfall. Therefore, the potential limits for these metals for outfall 001 contained in the draft 2019 permit were maintained and quarterly monitoring for these metals were added to outfall 002. The metals monitoring, which must be performed using the methods and detection limits listed in Part I.B. of the permit, is being implemented at outfall 002 to provide for the reporting of metals data to determine whether or not these metals are present in the effluent.

pH

The effluent limitations for pH have been set equal to the water quality criteria in the Rhode Island Water Quality Regulations (250-RICR-150-05) Part 1.10.D. which specifies that that the pH for freshwaters must be in the range of 6.5 - 9.0 s.u. or as naturally occurs. Therefore, the pH limits assigned to outfalls 001 and 002 have been set maintained at 6.5 – 9.0 s.u. Based upon the facility's historical effluent data, the facility has had difficulty complying with pH limits, therefore, DEM is to include pH in the extended Consent Agreement.

Water Treatment Chemicals

As described above, the WTF utilizes water treatment chemicals. The treatment chemicals used at the plant are aluminum sulfate and sodium hypochlorite. Each of these chemicals has been evaluated to determine whether or not restrictions on their use are necessary to protect Sneech Pond. Because total aluminum limits have been applied in the permit no additional restrictions are required for aluminum sulfate. TRC limitations have been applied in the permit, therefore, no usage restrictions are recommended for sodium hypochlorite. In addition, the permit includes limits for Total Iron, therefore, if the WTF were to begin using an iron-based treatment chemical, its use would be controlled by this permit. This permit does not authorize the use of any other treatment chemicals.

BPJ Based Permit Limitations

Total Suspended Solids (TSS)

The limits for TSS included in the permit issued on July 27, 2011 were designated at 30 mg/l monthly average and 50 mg/l daily maximum based on the treatment capabilities of wastewater treatment systems used for the treatment of potable water treatment waste streams throughout the country. The DEM has determined that the use of the best available treatment technologies are not cost prohibitive and that by using certain treatment technologies such as a settling lagoon or other device(s) whereby comparable control of suspended solids is possible, the 30 mg/l and 50 mg/l TSS limitations can be achieved. According to the U.S. Environmental Protection Agency Filter Backwash Recycling Rule Technical Guidance Manual, there are several options available for solids separation from spent filter backwash water and other residual waste streams. Typical treatment technologies that are available to meet these limits are settling lagoons, sand drying beds, mechanical dewatering systems such as tube and plate settlers and centrifuge equipment. These limits are consistent with the EPA's Final NPDES General Permits for Water Treatment Facility Discharges in the States of Massachusetts (MAG640000) and New Hampshire (NHG640000). Concentration based limits have been maintained for outfalls 001 and 002. Mass based limitations have been maintained for outfall 002 using the concentration-based limits listed above and the average flow value of 0.042 MGD or 42,000 gpd for the discharge from the automatic backwashing filters. Based on the facility's historical effluent data, DEM anticipates that the facility may have difficulty meeting its TSS limits, therefore DEM is willing to include TSS in the extended Consent Agreement.

Turbidity

Turbidity monitoring requirements have been maintained for outfalls 001 and 002. Part I.A.8 of the permit specified that the turbidity of the receiving water shall not exceed 5 NTU over natural background during discharges from outfalls 001 and 002.

Priority Pollutants

The permittee shall analyze its effluent from outfalls 001 and 002 for the EPA Priority Pollutants as listed in 40 CFR 122, Appendix D, Tables II and III and submit the results to the DEM at least 180 days prior to permit expiration with the permit reapplication. 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.

Residuals Management Requirements

Water treatment plant residuals form when suspended solids in the raw water react with chemicals such as coagulants added in the treatment processes. Some potable water treatment processes generate residuals that are relatively easy to process and dispose of. For example, leaves, limbs, logs, and other large floating debris separated from water during the initial screening process can be disposed of at conventional solid waste landfills. However, most other treatment processes produce more complex residual waste streams that may require advanced processing and disposal methods to protect human health and the environment. For a typical filtration water treatment system, the typical disposal options for these residuals consist of the following: landfilling, directly discharging to the sanitary sewer under authorization of the local industrial pretreatment program, or by shipping the residuals to a facility which possesses an effective Solid Waste Beneficial Use Determination (BUD) issued by the DEM Office of Waste Management. This permit requires that an up to date Residuals Management Plan, identifying how the residuals generated at the facility will be handled and disposed of, be submitted to the

DEM within six (6) months of the effective date of the permit. The specific Residuals Management Plan requirements can be found Part I.A.10 of the permit.

Storm Water

This permit does not authorize the discharge of storm water from the facility. The Sneech Pond Water Treatment Plant falls under Standard Industrial Classification (SIC) 4941 – Water Supply, which applies to establishments primarily engaged in distributing water for sale for domestic, commercial, and industrial use. Based on the RIPDES Program's review it has been determined that facilities that fall under SIC code 4941 are not required to obtain permit coverage for storm water discharges.

Antibacksliding/Antidegradation

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:

Section 303(d)(4)

A) 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.

B) 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 answered 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 the pollutant levels, which would result after 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 RIDEM's "Policy on the Implementation of the Antidegradation Provisions of the Rhode Island Water Quality Regulations July 2006" (the Policy) establishes 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 exceeds levels necessary to support 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 Implementation Policy, as amended.

Tier 2½. Where high quality waters constitute a Special Resource Protection Water SRPW[1], there shall be no measurable degradation of the existing water quality necessary to protect the characteristic(s) 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[2], that water quality shall be maintained and protected. The State may allow some limited activities that result in temporary and 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 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, RIDEM 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 RIDEM 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 (See Section VI.B.2) will be considered a significant impact and will be required to demonstrate important economic or social benefits to justify the activity (See Section VI.C. below). However, on a case-by-case basis, <u>any</u> proposed percent consumption 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

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

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

comparison would be the monthly average mass loading established by 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.

Water Quality Based Limits - Considering Antibacksliding and Antidegradation

The draft permit is being reissued with limitations as stringent as or more stringent than those in the existing permit with no change to the outfall location. The Antibacksliding Provision of the Clean Water Act (found at Section 402(o) and repeated at 40 CFR 122.44(l)) prohibits reissuing a permit containing less stringent effluent limits than the comparable limits from the previous permit. Since none of the potential permit limits, both concentration and mass loadings, are less stringent than the limits in the previous permit, antibacksliding and antidegradation regulations are being met.

Attachment C includes a summary comparison of the allowable limits vs. the DMR (Discharge Monitoring Report) data.

As mentioned above, comparisons of historical effluent data and/or permit application data and/or December 2016 Priority Pollutant Scan data to potential permit limits indicates that the facility will likely have difficulty complying with 2019 draft RIPDES permit limits for pH, TSS, Total Residual Chlorine, Aluminum, Beryllium, Chromium, Copper, Lead, Iron, and Zinc for outfall 001 (sedimentation basin decant discharge). In addition, similar comparisons for outfall 002 (filter backwash discharge) indicates that the facility will likely have difficulty complying with 2019 draft RIPDES permit limits for pH, TSS, Total Residual Chlorine, Aluminum, and Iron. Therefore, DEM is willing to maintain the existing Consent Agreement RIA-414 with the Town which would provide the Town with interim limits and a schedule to eliminate the discharges.

General

The effluent monitoring requirements have been specified in accordance with RIPDES regulations as well as 40 CFR 122.41(j), 122.44(l), and 122.48 to yield data representative of the discharge. 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 consisting primarily of management requirements common to all permits.

Summary of Permit limits

Table No. 1 Final Permit Limitations – outfall 001

Parameter	Monthly Average	Weekly Average	Daily Maximum
Flow	--- MGD		--- MGD
TSS	--- lb/day		--- lb/day
TSS	30 mg/l		50 mg/l
Turbidity			(--- NTU)
pH	(6.5 S.U.)		(9.0 S.U.)
Total Residual Chlorine	11 ug/L[1]		19 ug/L[1]
Total Aluminum	70 ug/L		600 ug/L
Total Iron	240 ug/L		--- ug/L
Beryllium	0.136 ug/L[2]		6 ug/L
Chromium III	22.15 ug/L		
Copper	2.28 ug/L		3.03 ug/L
Lead	0.44 ug/L		11.18 ug/L
Zinc	29.61 ug/L		29.61 ug/L

[1]Compliance with the limit for Chlorine Residual will be evaluated at the Quantitation Limit (QL) of 20 ug/L.
[2]Compliance with the limit for Beryllium will be evaluated at the Quantitation Limit (QL) of 0.2 ug/L.
--- signifies a parameter which must be monitored and data must be reported; no limit has been established at this time.

Table No. 2 Final Permit Limitations – outfall 002 (filter backwash discharge)

Parameter	Monthly Average	Weekly Average	Daily Maximum
Flow	0.042 MGD		--- MGD
TSS	10.5 lb/day		17.5 lb/day
TSS	30 mg/l		50 mg/l
Turbidity	--- NTU		--- NTU
pH	(6.5 S.U.)		(9.0 S.U.)
Total Residual Chlorine	11 ug/L[3]		19 ug/L[3]
Total Aluminum	70 ug/L		600 ug/L
Total Iron	240 ug/L		--- ug/L
Beryllium	--- ug/L		--- ug/L
Chromium III	--- ug/L		--- ug/L
Copper	--- ug/L		--- ug/L
Lead	--- ug/L		--- ug/L
Zinc	--- ug/L		--- ug/L

[3]Compliance with the limit for Chlorine Residual will be evaluated at the Quantitation Limit (QL) of 20 ug/L.
--- signifies a parameter which must be monitored and data must be reported; no limit has been established at this time.

IV. 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. Any person, prior to such date, may submit a request in writing for a public hearing to consider the draft permit to the Rhode Island Department of Environmental Management. Such requests shall state the nature of the issues proposed to be raised in the hearing. A public hearing may be held after at least thirty (30) days public notice whenever the Director finds that response to this notice indicates significant public interest. In reaching a final decision on the draft permit the Director will respond to all significant comments and make these responses available to the public at DEM's Providence Office.

Following the close of the comment period, and after a public hearing, if such hearing is held, the Director will issue a final permit decision and forward a copy of the final decision to the applicant and each person who has submitted written comments or requested notice. Within thirty (30) days following the notice of the final permit decision any interested person may submit a request for a formal hearing to reconsider or contest the final decision. Requests for formal hearings must satisfy the requirements of the Rhode Island Pollutant Discharge Elimination System Regulations (RIPDES Regulations - 250-RICR-150-10) Part 1.49.

V. 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.
Engineer II
RIPDES Program
Department of Environmental Management
235 Promenade Street
Providence, Rhode Island 02908
Telephone: (401) 222-4700, ext. 7046
Email: samuel.kaplan@dem.ri.gov

12/13/19
Date

Joseph B. Haberek, P.E.
Supervising Sanitary Engineer
Department of Environmental Management

ATTACHMENT A – HISTORICAL EFFLUENT DISHCARGE DATA

DESCRIPTION OF DISCHARGE: Sedimentation Basin Decant Discharge

DISCHARGE: 001

AVERAGE EFFLUENT CHARACTERISTICS AT POINT OF DISCHARGE OF SELECTED POLLUTANTS:

PARAMETER	AVERAGE[1]	DAILY MAX[1]
Flow, MGD	0.096	0.096
TSS, lbs/d	1128	2172
TSS, mg/L	902	1739
Turbidity, NTU		846
pH, SU	5.65	6.21
Total Residual Chlorine, ug/L	119	266
Total Aluminum, ug/L	167	324

[1] All data represents the average of the monthly average data and the average of the daily maximum data submitted by the permittee for this outfall for the period from January 2014 thru December 2018. Please note that non-detect values are coded in as zeros.

DESCRIPTION OF DISCHARGE: Filter Backwash Discharge

DISCHARGE: 002

AVERAGE EFFLUENT CHARACTERISTICS AT POINT OF DISCHARGE OF SELECTED POLLUTANTS:

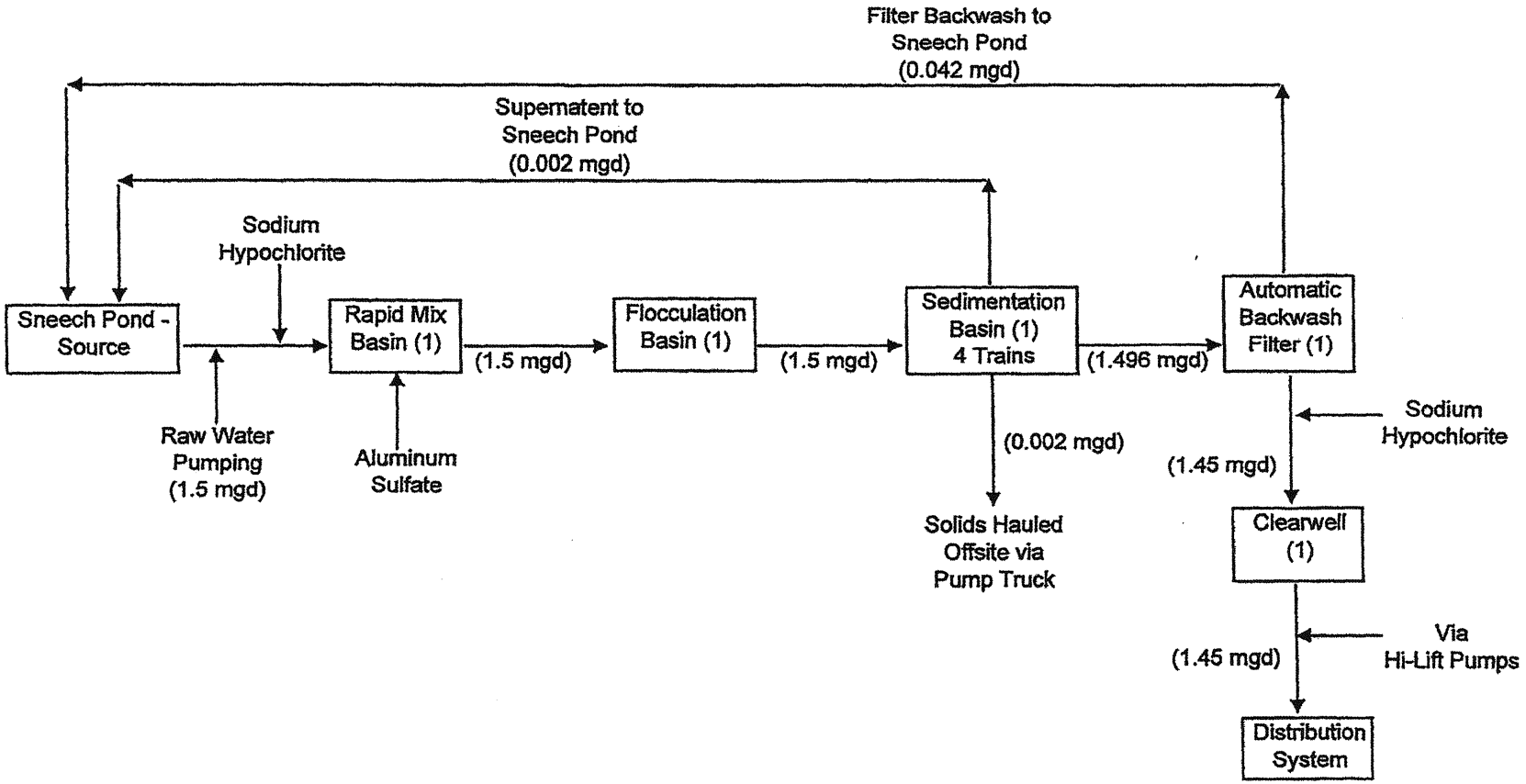
PARAMETER	AVERAGE[1]	DAILY MAX[1]
Flow, MGD	0.043	0.043
TSS, lbs/d	52	72
TSS, mg/L	22	30
Turbidity, NTU	15	27
pH, SU	5.92	6.27
Total Residual Chlorine, ug/L	436	529
Total Aluminum, ug/L	21	36

[1] All data represents the average of the monthly average data and the average of the daily maximum data submitted by the permittee for this outfall for the period from January 2014 thru December 2018. Please note that non-detect values are coded in as zeros.

ATTACHMENT B:

TOWN OF CUMBERLAND WATER DEPARTMENT
SNEECH POND WATER TREATMENT FACILITY
PROCESS DIAGRAM

Process Flow Diagram
Sneech Pond Surface Water Treatment Plant
Cumberland, RI



ATTACHMENT C:

WATER QUALITY CALCULATIONS

CALCULATION OF WATER QUALITY BASED CLASS AA FRESHWATER DISCHARGE LIMITS

FACILITY SPECIFIC DATA INPUT SHEET

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

FACILITY NAME: **Sneech Pond WTP**

RIPDES PERMIT #: **RI0023884**

	DISSOLVED BACKGROUND DATA (ug/L)	ACUTE METAL TRANSLATOR	CHRONIC METAL TRANSLATOR
ALUMINUM	**NA**	**NA**	**NA**
ARSENIC	**NA**	**1**	**1**
CADMIUM	**NA**	**1**	**0.967000673**
CHROMIUM III	**NA**	**0.316**	**0.86**
CHROMIUM VI	**NA**	**0.982**	**0.962**
COPPER	**NA**	**0.96**	**0.96**
LEAD	**NA**	**0.993001166**	**0.993001166**
MERCURY	**NA**	**0.85**	**0.85**
NICKEL	**NA**	**0.998**	**0.997**
SELENIUM	**NA**	**NA**	**NA**
SILVER	**NA**	**0.85**	**NA**
ZINC	**NA**	**0.978**	**0.986**
AMMONIA (as N)	**NA**		

USE NA WHEN NO DATA IS AVAILABLE

NOTE 1: METAL TRANSLATORS FROM RI WATER QUALITY REGS.

pH =	**7.5** S.U.
HARDNESS =	**25.0** (mg/L as CaCO3)

FLOW DATA	
DESIGN FLOW =	**0.139** MGD
=	0.215 CFS
7Q10 FLOW =	**0.000** CFS
7Q10 (JUNE-OCT) =	**0.000** CFS
7Q10 (NOV-MAY) =	**0.000** CFS
30Q5 FLOW =	**0.000** CFS
HARMONIC FLOW =	**0.000** CFS

DILUTION FACTORS	
ACUTE =	**1.000**
CHRONIC =	**1.000**
(MAY-OCT) =	**1.000**
(NOV-APR) =	**1.000**
30Q5 FLOW =	**1.000**
HARMONIC FLOW =	**1.000**

CALCULATION OF WATER QUALITY BASED CLASS AA FRESHWATER DISCHARGE LIMITS

FACILITY NAME: Sneech Pond WTP RIPDES PERMIT #: RI0023884

Month	Upper 90th% pH	Acute Criteria* mg/L as N	Chronic Criteria* mg/L as N
May	7.9	10.1	1.52
Jun	7.9	10.1	1.52
Jul	7.9	10.1	1.52
Aug	7.9	10.1	1.52
Sep	7.9	10.1	1.52
Oct	7.9	10.1	1.52
Nov	7.9	10.1	1.52
Dec	7.9	10.1	1.52
Jan	7.9	10.1	1.52
Feb	7.9	10.1	1.52
Mar	7.9	10.1	1.52
Apr	7.9	10.1	1.52

NOTE: Criteria from 250-RICR-150-05-1.10.D., summer T=24 deg. C

CALCULATION OF WATER QUALITY BASED CLASS AA FRESHWATER DISCHARGE LIMITS

FACILITY NAME: Sneech Pond WTP RIPDES PERMIT #: RI0023884

NOTE: METALS CRITERIA ARE EXPRESSED AS DISSOLVED, METALS LIMITS ARE EXPRESSED AS TOTAL

CHEMICAL NAME	CAS #	BACKGROUND CONCENTRATION (ug/L)	FRESHWATER CRITERIA ACUTE (ug/L)	DAILY MAX LIMIT (ug/L)	FRESHWATER 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		450	360	10	5.6	4.48
ARSENIC (limits are total recoverable)	7440382	NA	340	272	150	0.18	0.144
ASBESTOS	1332214			No Criteria		7000000	5600000
BERYLLIUM	7440417		7.5	6	0.17		0.136
CADMIUM (limits are total recoverable)	7440439	NA	0.522206507	0.417765206	0.093696824		0.077515416
CHROMIUM III (limits are total recoverable)	16065831	NA	183.0659069	463.4579922	23.81311337		22.15173337
CHROMIUM VI (limits are total recoverable)	18540299	NA	16	13.03462322	11		9.147609148
COPPER (limits are total recoverable)	7440508	NA	3.640069619	3.033391349	2.739313654	1300	2.282761378
CYANIDE	57125		22	17.6	5.2	140	4.16
LEAD (limits are total recoverable)	7439921	NA	13.88217279	11.18401329	0.540968344		0.435824942
MERCURY (limits are total recoverable)	7439976	NA	1.4	1.317647059	0.77	0.14	0.131764706
NICKEL (limits are total recoverable)	7440020	NA	144.9178377	116.1666034	16.09589771	610	12.91546456
SELENIUM (limits are total recoverable)	7782492	NA	20	16	5	170	4
SILVER (limits are total recoverable)	7440224	NA	0.31788916	0.299189798	NA		No Criteria
THALLIUM	7440280		46	36.8	1	0.24	0.192
ZINC (limits are total recoverable)	7440666	NA	36.20176511	29.61289579	36.49789406	7400	29.61289579
VOLATILE ORGANIC COMPOUNDS							
ACROLEIN	107028		2.9	2.32	0.06	190	0.048
ACRYLONITRILE	107131		378	302.4	8.4	0.51	0.408
BENZENE	71432		265	212	5.9	22	4.72
BROMOFORM	75252		1465	1172	33	43	26.4
CARBON TETRACHLORIDE	56235		1365	1092	30	2.3	1.84
CHLOROBENZENE	108907		795	636	18	130	14.4
CHLORODIBROMOMETHANE	124481			No Criteria		4	3.2
CHLOROFORM	67663		1445	1156	32	57	25.6
DICHLOROBROMOMETHANE	75274			No Criteria		5.5	4.4
1,2DICHLOROETHANE	107062		5900	4720	131	3.8	3.04
1,1DICHLOROETHYLENE	75354		580	464	13	330	10.4
1,2DICHLOROPROPANE	78875		2625	2100	58	5	4
1,3DICHLOROPROPYLENE	542756			No Criteria		0.34	0.272
ETHYLBENZENE	100414		1600	1280	36	530	28.8
BROMOMETHANE (methyl bromide)	74839			No Criteria		47	37.6
CHLOROMETHANE (methyl chloride)	74873			No Criteria			No Criteria
METHYLENE CHLORIDE	75092		9650	7720	214	46	36.8

CALCULATION OF WATER QUALITY BASED CLASS AA FRESHWATER DISCHARGE LIMITS

FACILITY NAME: Sneech Pond WTP RIPDES PERMIT #: RI0023884

NOTE: METALS CRITERIA ARE EXPRESSED AS DISSOLVED, METALS LIMITS ARE EXPRESSED AS TOTAL

CHEMICAL NAME	CAS #	BACKGROUND CONCENTRATION (ug/L)	FRESHWATER CRITERIA ACUTE (ug/L)	DAILY MAX LIMIT (ug/L)	FRESHWATER CRITERIA CHRONIC (ug/L)	HUMAN HEALTH NON-CLASS A CRITERIA (ug/L)	MONTHLY AVE LIMIT (ug/L)
1,1,2,2TETRACHLOROETHANE	79345		466	372.8	10	1.7	1.36
TETRACHLOROETHYLENE	127184		240	192	5.3	6.9	4.24
TOLUENE	108883		635	508	14	1300	11.2
1,2TRANSDICHLOROETHYLENE	156605			No Criteria		140	112
1,1,1TRICHLOROETHANE	71556			No Criteria			No Criteria
1,1,2TRICHLOROETHANE	79005		900	720	20	5.9	4.72
TRICHLOROETHYLENE	79016		1950	1560	43	25	20
VINYL CHLORIDE	75014			No Criteria		0.025	0.02
ACID ORGANIC COMPOUNDS							
2CHLOROPHENOL	95578		129	103.2	2.9	81	2.32
2,4DICHLOROPHENOL	120832		101	80.8	2.2	77	1.76
2,4DIMETHYLPHENOL	105679		106	84.8	2.4	380	1.92
4,6DINITRO2METHYL PHENOL	534521			No Criteria		13	10.4
2,4DINITROPHENOL	51285		31	24.8	0.69	69	0.552
4NITROPHENOL	88755			No Criteria			No Criteria
PENTACHLOROPHENOL	87865		0.058191123	0.046552898	0.044644576	2.7	0.035715661
PHENOL	108952		251	200.8	5.6	21000	4.48
2,4,6TRICHLOROPHENOL	88062		16	12.8	0.36	14	0.288
BASE NEUTRAL COMPUNDS							
ACENAPHTHENE	83329		85	68	1.9	670	1.52
ANTHRACENE	120127			No Criteria		8300	6640
BENZIDINE	92875			No Criteria		0.00086	0.000688
POLYCYCLIC AROMATIC HYDROCARBONS				No Criteria		0.038	0.0304
BIS(2CHLOROETHYL)ETHER	111444			No Criteria		0.3	0.24
BIS(2CHLOROISOPROPYL)ETHER	108601			No Criteria		1400	1120
BIS(2ETHYLHEXYL)PHTHALATE	117817		555	444	12	12	9.6
BUTYL BENZYL PHTHALATE	85687		85	68	1.9	1500	1.52
2CHLORONAPHTHALENE	91587			No Criteria		1000	800
1,2DICHLOROBENZENE	95501		79	63.2	1.8	420	1.44
1,3DICHLOROBENZENE	541731		390	312	8.7	320	6.96
1,4DICHLOROBENZENE	106467		56	44.8	1.2	63	0.96
3,3DICHLOROBENZIDENE	91941			No Criteria		0.21	0.168
DIETHYL PHTHALATE	84662		2605	2084	58	17000	46.4
DIMETHYL PHTHALATE	131113		1650	1320	37	270000	29.6
DI-n-BUTYL PHTHALATE	84742			No Criteria		2000	1600
2,4DINITROTOLUENE	121142		1550	1240	34	1.1	0.88

CALCULATION OF WATER QUALITY BASED CLASS AA FRESHWATER DISCHARGE LIMITS

FACILITY NAME: Sneech Pond WTP RIPDES PERMIT #: RI0023884

NOTE: METALS CRITERIA ARE EXPRESSED AS DISSOLVED, METALS LIMITS ARE EXPRESSED AS TOTAL

CHEMICAL NAME	CAS #	BACKGROUND CONCENTRATION (ug/L)	FRESHWATER CRITERIA ACUTE (ug/L)	DAILY MAX LIMIT (ug/L)	FRESHWATER CRITERIA CHRONIC (ug/L)	HUMAN HEALTH NON-CLASS A CRITERIA (ug/L)	MONTHLY AVE LIMIT (ug/L)
1,2DIPHENYLHYDRAZINE	122667		14	11.2	0.31	0.36	0.248
FLUORANTHENE	206440		199	159.2	4.4	130	3.52
FLUORENE	86737			No Criteria		1100	880
HEXACHLOROBENZENE	118741			No Criteria		0.0028	0.00224
HEXACHLOROBUTADIENE	87683			No Criteria		4.4	3.52
HEXACHLOROCYCLOPENTADIENE	77474		0.35	0.28	0.008	40	0.0064
HEXACHLOROETHANE	67721		49	39.2	1.1	14	0.88
ISOPHORONE	78591		5850	4680	130	350	104
NAPHTHALENE	91203		115	92	2.6		2.08
NITROBENZENE	98953		1350	1080	30	17	13.6
N-NITROSODIMETHYLAMINE	62759			No Criteria		0.0069	0.00552
N-NITROSODI-N-PROPYLAMINE	621647			No Criteria		0.05	0.04
N-NITROSODIPHENYLAMINE	86306		293	234.4	6.5	33	5.2
PYRENE	129000			No Criteria		830	664
1,2,4trichlorobenzene	120821		75	60	1.7	35	1.36
PESTICIDES/PCBs							
ALDRIN	309002		3	2.4		0.00049	0.000392
Alpha BHC	319846			No Criteria		0.026	0.0208
Beta BHC	319857			No Criteria		0.091	0.0728
Gamma BHC (Lindane)	58899		0.95	0.76		0.98	0.784
CHLORDANE	57749		2.4	1.92	0.0043	0.008	0.00344
4,4DDT	50293		1.1	0.88	0.001	0.0022	0.0008
4,4DDE	72559			No Criteria		0.0022	0.00176
4,4DDD	72548			No Criteria		0.0031	0.00248
DIELDRIN	60571		0.24	0.192	0.056	0.00052	0.000416
ENDOSULFAN (alpha)	959988		0.22	0.176	0.056	62	0.0448
ENDOSULFAN (beta)	33213659		0.22	0.176	0.056	62	0.0448
ENDOSULFAN (sulfate)	1031078			No Criteria		62	49.6
ENDRIN	72208		0.086	0.0688	0.036	0.059	0.0288
ENDRIN ALDEHYDE	7421934			No Criteria		0.29	0.232
HEPTACHLOR	76448		0.52	0.416	0.0038	0.00079	0.000632
HEPTACHLOR EPOXIDE	1024573		0.52	0.416	0.0038	0.00039	0.000312
POLYCHLORINATED BIPHENYLS3	1336363			No Criteria	0.014	0.00064	0.000512
2,3,7,8TCDD (Dioxin)	1746016			No Criteria		0.00000005	0.00000004
TOXAPHENE	8001352		0.73	0.584	0.0002	0.0028	0.00016
TRIBUTYLTIN			0.46	0.368	0.072		0.0576

CALCULATION OF WATER QUALITY BASED CLASS AA FRESHWATER DISCHARGE LIMITS

FACILITY NAME: Sneech Pond WTP RIPDES PERMIT #: RI0023884

NOTE: METALS CRITERIA ARE EXPRESSED AS DISSOLVED, METALS LIMITS ARE EXPRESSED AS TOTAL

CHEMICAL NAME	CAS #	BACKGROUND CONCENTRATION (ug/L)	FRESHWATER CRITERIA ACUTE (ug/L)	DAILY MAX LIMIT (ug/L)	FRESHWATER 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	750	600	87		69.6
AMMONIA as N(winter/summer)	7664417		10.1 | 10.1	8080 | 8080	1.52 | 1.52		1216 | 1216
4BROMOPHENYL PHENYL ETHER			18	14.4	0.4		0.32
CHLORIDE	16887006		860000	688000	230000		184000
CHLORINE	7782505		19	19	11		11
4CHLORO2METHYLPHENOL			15	12	0.32		0.256
1CHLORONAPHTHALENE			80	64	1.8		1.44
4CHLOROPHENOL	106489		192	153.6	4.3		3.44
2,4DICHLORO6METHYLPHENOL			22	17.6	0.48		0.384
1,1DICHLOROPROPANE			1150	920	26		20.8
1,3DICHLOROPROPANE	142289		303	242.4	6.7		5.36
2,3DINITROTOLUENE			17	13.6	0.37		0.296
2,4DINITRO6METHYL PHENOL			12	9.6	0.26		0.208
IRON	7439896			No Criteria	1000	300	240
pentachlorobenzene	608935		13	10.4	0.28		0.224
PENTACHLOROETHANE			362	289.6	8		6.4
1,2,3,5tetrachlorobenzene			321	256.8	7.1		5.68
1,1,1,2TETRACHLOROETHANE	630206		980	784	22		17.6
2,3,4,6TETRACHLOROPHENOL	58902		7	5.6	0.16		0.128
2,3,5,6TETRACHLOROPHENOL			8.5	6.8	0.19		0.152
2,4,5TRICHLOROPHENOL	95954		23	18.4	0.51		0.408
2,4,6TRINITROPHENOL	88062		4235	3388	94		75.2
XYLENE	1330207		133	106.4	3		2.4

CALCULATION OF WATER QUALITY BASED CLASS AA FRESHWATER DISCHARGE LIMITS

FACILITY NAME: Sneech Pond WTP RIPDES PERMIT #: RI0023884

CHEMICAL NAME	CAS#	DAILY MAX LIMIT (ug/L)	MONTHLY AVE LIMIT (ug/L)
PRIORITY POLLUTANTS:			
TOXIC METALS AND CYANIDE			
ANTIMONY	7440360	360.00	4.48
ARSENIC, TOTAL	7440382	272.00	0.14
ASBESTOS	1332214	No Criteria	5600000.00
BERYLLIUM	7440417	6.00	0.14
CADMIUM, TOTAL	7440439	0.42	0.08
CHROMIUM III, TOTAL	16065831	463.46	22.15
CHROMIUM VI, TOTAL	18540299	13.03	9.15
COPPER, TOTAL	7440508	3.03	2.28
CYANIDE	57125	17.60	4.16
LEAD, TOTAL	7439921	11.18	0.44
MERCURY, TOTAL	7439976	1.32	0.13
NICKEL, TOTAL	7440020	116.17	12.92
SELENIUM, TOTAL	7782492	16.00	4.00
SILVER, TOTAL	7440224	0.30	No Criteria
THALLIUM	7440280	36.80	0.19
ZINC, TOTAL	7440666	29.61	29.61
VOLATILE ORGANIC COMPOUNDS			
ACROLEIN	107028	2.32	0.05
ACRYLONITRILE	107131	302.40	0.41
BENZENE	71432	212.00	4.72
BROMOFORM	75252	1172.00	26.40
CARBON TETRACHLORIDE	56235	1092.00	1.84
CHLOROBENZENE	108907	636.00	14.40
CHLORODIBROMOMETHANE	124481	No Criteria	3.20
CHLOROFORM	67663	1156.00	25.60
DICHLOROBROMOMETHANE	75274	No Criteria	4.40
1,2DICHLOROETHANE	107062	4720.00	3.04
1,1DICHLOROETHYLENE	75354	464.00	10.40
1,2DICHLOROPROPANE	78875	2100.00	4.00
1,3DICHLOROPROPYLENE	542756	No Criteria	0.27
ETHYLBENZENE	100414	1280.00	28.80
BROMOMETHANE (methyl bromide)	74839	No Criteria	37.60
CHLOROMETHANE (methyl chloride)	74873	No Criteria	0.00000
METHYLENE CHLORIDE	75092	7720.00	36.80
1,1,2,2TETRACHLOROETHANE	79345	372.80	1.36
TETRACHLOROETHYLENE	127184	192.00	4.24
TOLUENE	108883	508.00	11.20
1,2TRANSDICHLOROETHYLENE	156605	No Criteria	112.00
1,1,1TRICHLOROETHANE	71556	No Criteria	0.00000
1,1,2TRICHLOROETHANE	79005	720.00	4.72
TRICHLOROETHYLENE	79016	1560.00	20.00
VINYL CHLORIDE	75014	No Criteria	0.02
ACID ORGANIC COMPOUNDS			
2CHLOROPHENOL	95578	103.20	2.32
2,4DICHLOROPHENOL	120832	80.80	1.76
2,4DIMETHYLPHENOL	105679	84.80	1.92
4,6DINITRO2METHYL PHENOL	534521	No Criteria	10.40
2,4DINITROPHENOL	51285	24.80	0.55
4NITROPHENOL	88755	No Criteria	0.00000
PENTACHLOROPHENOL	87865	0.05	0.04
PHENOL	108952	200.80	4.48
2,4,6TRICHLOROPHENOL	88062	12.80	0.29
BASE NEUTRAL COMPUNDS			
ACENAPHTHENE	83329	68.00	1.52
ANTHRACENE	120127	No Criteria	6640.00
BENZIDINE	92875	No Criteria	0.00069
PAHs		No Criteria	0.03
BIS(2CHLOROETHYL)ETHER	111444	No Criteria	0.24
BIS(2CHLOROISOPROPYL)ETHER	108601	No Criteria	1120.00
BIS(2ETHYLHEXYL)PHTHALATE	117817	444.00	9.60
BUTYL BENZYL PHTHALATE	85687	68.00	1.52
2CHLORONAPHTHALENE	91587	No Criteria	800.00
1,2DICHLOROBENZENE	95501	63.20	1.44
1,3DICHLOROBENZENE	541731	312.00	6.96
1,4DICHLOROBENZENE	106467	44.80	0.96
3,3DICHLOROBENZIDENE	91941	No Criteria	0.17
DIETHYL PHTHALATE	84662	2084.00	46.40
DIMETHYL PHTHALATE	131113	1320.00	29.60
DI-n-BUTYL PHTHALATE	84742	No Criteria	1600.00
2,4DINITROTOLUENE	121142	1240.00	0.88
1,2DIPHENYLHYDRAZINE	122667	11.20	0.25
FLUORANTHENE	206440	159.20	3.52

CALCULATION OF WATER QUALITY BASED CLASS AA FRESHWATER DISCHARGE LIMITS

FACILITY NAME: Sneech Pond WTP RIPDES PERMIT #: RI0023884

CHEMICAL NAME	CAS#	DAILY MAX LIMIT (ug/L)	MONTHLY AVE LIMIT (ug/L)
FLUORENE	86737	No Criteria	880.00
HEXACHLOROBENZENE	118741	No Criteria	0.00224
HEXACHLOROBUTADIENE	87683	No Criteria	3.52
HEXACHLOROCYCLOPENTADIENE	77474	0.28	0.00640
HEXACHLOROETHANE	67721	39.20	0.88
ISOPHORONE	78591	4680.00	104.00
NAPHTHALENE	91203	92.00	2.08
NITROBENZENE	98953	1080.00	13.60
N-NITROSODIMETHYLAMINE	62759	No Criteria	0.00552
N-NITROSODI-N-PROPYLAMINE	621647	No Criteria	0.04
N-NITROSODIPHENYLAMINE	86306	234.40	5.20
PYRENE	129000	No Criteria	664.00
1,2,4trichlorobenzene	120821	60.00	1.36
PESTICIDES/PCBs			
ALDRIN	309002	2.40	0.00039
Alpha BHC	319846	No Criteria	0.02
Beta BHC	319857	No Criteria	0.07
Gamma BHC (Lindane)	58899	0.76	0.76
CHLORDANE	57749	1.92	0.00344
4,4DDT	50293	0.88	0.00080
4,4DDE	72559	No Criteria	0.00176
4,4DDD	72548	No Criteria	0.00248
DIELDRIN	60571	0.19	0.00042
ENDOSULFAN (alpha)	959988	0.18	0.04
ENDOSULFAN (beta)	33213659	0.18	0.04
ENDOSULFAN (sulfate)	1031078	No Criteria	49.60
ENDRIN	72208	0.07	0.03
ENDRIN ALDEHYDE	7421934	No Criteria	0.23
HEPTACHLOR	76448	0.42	0.00063
HEPTACHLOR EPOXIDE	1024573	0.42	0.00031
POLYCHLORINATED BIPHENYLS3	1336363	No Criteria	0.00051
2,3,7,8TCDD (Dioxin)	1746016	No Criteria	0.00000
TOXAPHENE	8001352	0.58	0.00016
TRIBUTYLTIN		0.37	0.06

CHEMICAL NAME	CAS#	DAILY MAX LIMIT (ug/L)	MONTHLY AVE LIMIT (ug/L)
NON PRIORITY POLLUTANTS:			
OTHER SUBSTANCES			
ALUMINUM, TOTAL	7429905	600.00	69.60
AMMONIA (as N), WINTER (NOV-APF	7664417	8080.00	1216.00
AMMONIA (as N), SUMMER (MAY-OC	7664417	8080.00	1216.00
4BROMOPHENYL PHENYL ETHER		14.40	0.32
CHLORIDE	16887006	688000.00	184000.00
CHLORINE	7782505	19.00	11.00
4CHLORO2METHYLPHENOL		12.00	0.26
1CHLORONAPHTHALENE		64.00	1.44
4CHLOROPHENOL	106489	153.60	3.44
2,4DICHLORO6METHYLPHENOL		17.60	0.38
1,1DICHLOROPROPANE		920.00	20.80
1,3DICHLOROPROPANE	142289	242.40	5.36
2,3DINITROTOLUENE		13.60	0.30
2,4DINITRO6METHYL PHENOL		9.60	0.21
IRON	7439896	No Criteria	240.00
pentachlorobenzene	608935	10.40	0.22
PENTACHLOROETHANE		289.60	6.40
1,2,3,5tetrachlorobenzene		256.80	5.68
1,1,1,2TETRACHLOROETHANE	630206	784.00	17.60
2,3,4,6TETRACHLOROPHENOL	58902	5.60	0.13
2,3,5,6TETRACHLOROPHENOL		6.80	0.15
2,4,5TRICHLOROPHENOL	95954	18.40	0.41
2,4,6TRINITROPHENOL	88062	3388.00	75.20
XYLENE	1330207	106.40	2.40

Facility Name: *Sneech Pond WTP*
RIPDES Permit #: *RI0023884*
Outfall #: *001A*

NOTE: METALS LIMITS ARE TOTAL METALS

Parameter	CAS #	Concentration Limits (ug/L) Based on WQ Criteria		Antideg. Limits (ug/L)	Ave PPS Data (ug/L) and Ap. Data (ug/L)		Ave. DMR Data (ug/L) 1/14-12/18		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	MO Ave
PRIORITY POLLUTANTS												
TOXIC METALS AND CYANIDE												
ANTIMONY	7440360	360.00	4.48	---	---	---	---	---	360	4.48		
ARSENIC (limits are total recoverable)	7440382	272.00	0.14	---	---	---	---	---	272	0.144		
ASBESTOS	1332214	No Criteria	5600000.00	---	---	---	---	---	---	5600000		
BERYLLIUM	7440417	6.00	0.14	---	5.2	5.2	---	---	6	0.136	Y	Y
CADMIUM (limits are total recoverable)	7440439	0.42	0.08	---	---	---	---	---	0.41776521	0.077515416		
CHROMIUM III (limits are total recoverable)	16065831	463.46	22.15	---	122	122	---	---	463.457992	22.15173337	N	Y
CHROMIUM VI (limits are total recoverable)	18540299	13.03	9.15	---	---	---	---	---	13.0346232	9.147609148		
COPPER (limits are total recoverable)	7440508	3.03	2.28	---	22	22	---	---	3.03339135	2.282761378	Y	Y
CYANIDE	57125	17.60	4.16	---	---	---	---	---	17.6	4.16		
LEAD (limits are total recoverable)	7439921	11.18	0.44	---	11	11	---	---	11.1840133	0.435824942	Y	Y
MERCURY (limits are total recoverable)	7439976	1.32	0.13	---	---	---	---	---	1.31764706	0.131764706		
NICKEL (limits are total recoverable)	7440020	116.17	12.92	---	---	---	---	---	116.166603	12.91546456		
SELENIUM (limits are total recoverable)	7782492	16.00	4.00	---	---	---	---	---	16	4		
SILVER (limits are total recoverable)	7440224	0.30	No Criteria	---	---	---	---	---	0.2991898	0.299189798		
THALLIUM	7440280	36.80	0.19	---	---	---	---	---	36.8	0.192		
ZINC (limits are total recoverable)	7440666	29.61	29.61	---	77	77	---	---	29.6128958	29.61289579	Y	Y
VOLATILE ORGANIC COMPOUNDS												
ACROLEIN	107028	2.32	0.05	---	---	---	---	---	2.32	0.048		
ACRYLONITRILE	107131	302.40	0.41	---	---	---	---	---	302.4	0.408		
BENZENE	71432	212.00	4.72	---	---	---	---	---	212	4.72		
BROMOFORM	75252	1172.00	26.40	---	---	---	---	---	1172	26.4		
CARBON TETRACHLORIDE	56235	1092.00	1.84	---	---	---	---	---	1092	1.84		
CHLOROBENZENE	108907	636.00	14.40	---	---	---	---	---	636	14.4		
CHLORODIBROMOMETHANE	124481	No Criteria	3.20	---	---	---	---	---	---	3.2		
CHLOROFORM	67663	1156.00	25.60	---	---	---	---	---	1156	25.6		
DICHLOROBROMOMETHANE	75274	No Criteria	4.40	---	---	---	---	---	---	4.4		
1,2DICHLOROETHANE	107062	4720.00	3.04	---	---	---	---	---	4720	3.04		

1,1DICHLOROETHYLENE	75354	464.00	10.40	---	---	---	---	---	464	10.4		
1,2DICHLOROPROPANE	78875	2100.00	4.00	---	---	---	---	---	2100	4		
1,3DICHLOROPROPYLENE	542756	No Criteria	0.27	---	---	---	---	---	---	0.272		
ETHYLBENZENE	100414	1280.00	28.80	---	---	---	---	---	1280	28.8		
BROMOMETHANE (methyl bromide)	74839	No Criteria	37.60	---	---	---	---	---	---	37.6		
CHLOROMETHANE (methyl chloride)	74873	No Criteria	0.00	---	---	---	---	---	---	0		
METHYLENE CHLORIDE	75092	7720.00	36.80	---	---	---	---	---	7720	36.8		
1,1,2,2TETRACHLOROETHANE	79345	372.80	1.36	---	---	---	---	---	372.8	1.36		
TETRACHLOROETHYLENE	127184	192.00	4.24	---	---	---	---	---	192	4.24		
TOLUENE	108883	508.00	11.20	---	---	---	---	---	508	11.2		
1,2TRANSDICHLOROETHYLENE	156605	No Criteria	112.00	---	---	---	---	---	---	112		
1,1,1TRICHLOROETHANE	71556	No Criteria	0.00	---	---	---	---	---	---	0		
1,1,2TRICHLOROETHANE	79005	720.00	4.72	---	---	---	---	---	720	4.72		
TRICHLOROETHYLENE	79016	1560.00	20.00	---	---	---	---	---	1560	20		
VINYL CHLORIDE	75014	No Criteria	0.02	---	---	---	---	---	---	0.02		
ACID ORGANIC COMPOUNDS		0.00	0.00									
2CHLOROPHENOL	95578	103.20	2.32	---	---	---	---	---	103.2	2.32		
2,4DICHLOROPHENOL	120832	80.80	1.76	---	---	---	---	---	80.8	1.76		
2,4DIMETHYLPHENOL	105679	84.80	1.92	---	---	---	---	---	84.8	1.92		
4,6DINITRO2METHYL PHENOL	534521	No Criteria	10.40	---	---	---	---	---	---	10.4		
2,4DINITROPHENOL	51285	24.80	0.55	---	---	---	---	---	24.8	0.552		
4NITROPHENOL	88755	No Criteria	0.00	---	---	---	---	---	---	0		
PENTACHLOROPHENOL	87865	0.05	0.04	---	---	---	---	---	0.0465529	0.035715661		
PHENOL	108952	200.80	4.48	---	---	---	---	---	200.8	4.48		
2,4,6TRICHLOROPHENOL	88062	12.80	0.29	---	---	---	---	---	12.8	0.288		
BASE NEUTRAL COMPOUNDS		0.00	0.00									
ACENAPHTHENE	83329	68.00	1.52	---	---	---	---	---	68	1.52		
ANTHRACENE	120127	No Criteria	6640.00	---	---	---	---	---	---	6640		
BENZIDINE	92875	No Criteria	0.00	---	---	---	---	---	---	0.000688		
POLYCYCLIC AROMATIC HYDROCARBONS		No Criteria	0.03	---	---	---	---	---	---	0.0304		
BIS(2CHLOROETHYL)ETHER	111444	No Criteria	0.24	---	---	---	---	---	---	0.24		
BIS(2CHLOROISOPROPYL)ETHER	108601	No Criteria	1120.00	---	---	---	---	---	---	1120		
BIS(2ETHYLHEXYL)PHTHALATE	117817	444.00	9.60	---	---	---	---	---	444	9.6		
BUTYL BENZYL PHTHALATE	85687	68.00	1.52	---	---	---	---	---	68	1.52		
2CHLORONAPHTHALENE	91587	No Criteria	800.00	---	---	---	---	---	---	800		
1,2DICHLOROBENZENE	95501	63.20	1.44	---	---	---	---	---	63.2	1.44		
1,3DICHLOROBENZENE	541731	312.00	6.96	---	---	---	---	---	312	6.96		
1,4DICHLOROBENZENE	106467	44.80	0.96	---	---	---	---	---	44.8	0.96		
3,3DICHLOROBENZIDENE	91941	No Criteria	0.17	---	---	---	---	---	---	0.168		
DIETHYL PHTHALATE	84662	2084.00	46.40	---	---	---	---	---	2084	46.4		

DIMETHYL PHTHALATE	131113	1320.00	29.60	---	---	---	---	---	1320	29.6		
DInBUTYL PHTHALATE	84742	No Criteria	1600.00	---	---	---	---	---	---	1600		
2,4DINITROTOLUENE	121142	1240.00	0.88	---	---	---	---	---	1240	0.88		
1,2DIPHENYLHYDRAZINE	122667	11.20	0.25	---	---	---	---	---	11.2	0.248		
FLUORANTHENE	206440	159.20	3.52	---	---	---	---	---	159.2	3.52		
FLUORENE	86737	No Criteria	880.00	---	---	---	---	---	---	880		
HEXACHLOROBENZENE	118741	No Criteria	0.00	---	---	---	---	---	---	0.00224		
HEXACHLOROBUTADIENE	87683	No Criteria	3.52	---	---	---	---	---	---	3.52		
HEXACHLOROCYCLOPENTADIENE	77474	0.28	0.01	---	---	---	---	---	0.28	0.0064		
HEXACHLOROETHANE	67721	39.20	0.88	---	---	---	---	---	39.2	0.88		
ISOPHORONE	78591	4680.00	104.00	---	---	---	---	---	4680	104		
NAPHTHALENE	91203	92.00	2.08	---	---	---	---	---	92	2.08		
NITROBENZENE	98953	1080.00	13.60	---	---	---	---	---	1080	13.6		
NNITROSODIMETHYLAMINE	62759	No Criteria	0.01	---	---	---	---	---	---	0.00552		
NNITROSODINPROPYLAMINE	621647	No Criteria	0.04	---	---	---	---	---	---	0.04		
NNITROSODIPHENYLAMINE	86306	234.40	5.20	---	---	---	---	---	234.4	5.2		
PYRENE	129000	No Criteria	664.00	---	---	---	---	---	---	664		
1,2,4trichlorobenzene	120821	60.00	1.36	---	---	---	---	---	60	1.36		
PESTICIDES/PCBs												
ALDRIN	309002	2.40	0.00	---	---	---	---	---	2.4	0.000392		
Alpha BHC	319846	No Criteria	0.02	---	---	---	---	---	---	0.0208		
Beta BHC	319857	No Criteria	0.07	---	---	---	---	---	---	0.0728		
Gamma BHC (Lindane)	58899	0.76	0.76	---	---	---	---	---	0.76	0.76		
CHLORDANE	57749	1.92	0.00	---	---	---	---	---	1.92	0.00344		
4,4DDT	50293	0.88	0.00	---	---	---	---	---	0.88	0.0008		
4,4DDE	72559	No Criteria	0.00	---	---	---	---	---	---	0.00176		
4,4DDD	72548	No Criteria	0.00	---	---	---	---	---	---	0.00248		
DIELDRIN	60571	0.19	0.00	---	---	---	---	---	0.192	0.000416		
ENDOSULFAN (alpha)	959988	0.18	0.04	---	---	---	---	---	0.176	0.0448		
ENDOSULFAN (beta)	33213659	0.18	0.04	---	---	---	---	---	0.176	0.0448		
ENDOSULFAN (sulfate)	1031078	No Criteria	49.60	---	---	---	---	---	---	49.6		
ENDRIN	72208	0.07	0.03	---	---	---	---	---	0.0688	0.0288		
ENDRIN ALDEHYDE	7421934	No Criteria	0.23	---	---	---	---	---	---	0.232		
HEPTACHLOR	76448	0.42	0.00	---	---	---	---	---	0.416	0.000632		
HEPTACHLOR EPOXIDE	1024573	0.42	0.00	---	---	---	---	---	0.416	0.000312		
POLYCHLORINATED BIPHENYLS3	1336363	No Criteria	0.00	---	---	---	---	---	---	0.000512		
2,3,7,8TCDD (Dioxin)	1746016	No Criteria	0.00	---	---	---	---	---	---	0.00000004		
TOXAPHENE	8001352	0.58	0.00	---	---	---	---	---	0.584	0.00016		
TRIBUTYLTIN		0.37	0.06						0.368	0.0576		
NON PRIORITY POLLUTANTS:												

OTHER SUBSTANCES												
ALUMINUM (limits are total recoverable)	7429905	600.00	69.60	---	997	997	324	167	600	69.6	Y	Y
AMMONIA (winter)	7664417	8080.00	1216.00	---	270	270	---	---	8080	1216	N	N
AMMONIA (summer)		8080.00	1216.00	---	270	270	---	---	8080	1216	N	N
4BROMOPHENYL PHENYL ETHER	16887006	14.40	0.32	---	---	---	---	---	14.4	0.32		
CHLORIDE	7782505	688000.00	184000.00						688000	184000		
CHLORINE		19.00	11.00	---	1080	590	266	119	19	11	Y	Y
4CHLORO2METHYLPHENOL		12.00	0.26	---	---	---	---	---	12	0.256		
1CHLORONAPHTHALENE	106489	64.00	1.44	---	---	---	---	---	64	1.44		
4CHLOROPHENOL		153.60	3.44	---	---	---	---	---	153.6	3.44		
2,4DICHLORO6METHYLPHENOL		17.60	0.38	---	---	---	---	---	17.6	0.384		
1,1DICHLOROPROPANE	142289	920.00	20.80	---	---	---	---	---	920	20.8		
1,3DICHLOROPROPANE		242.40	5.36	---	---	---	---	---	242.4	5.36		
2,3DINITROTOLUENE		13.60	0.30	---	---	---	---	---	13.6	0.296		
2,4DINITRO6METHYL PHENOL	7439896	9.60	0.21	---	---	---	---	---	9.6	0.208		
IRON	608935	No Criteria	240.00	---	57200	33890			---	240		Y
pentachlorobenzene		10.40	0.22	---	---	---	---	---	10.4	0.224		
PENTACHLOROETHANE		289.60	6.40	---	---	---	---	---	289.6	6.4		
1,2,3,5tetrachlorobenzene	630206	256.80	5.68	---	---	---	---	---	256.8	5.68		
1,1,1,2TETRACHLOROETHANE	58902	784.00	17.60	---	---	---	---	---	784	17.6		
2,3,4,6TETRACHLOROPHENOL		5.60	0.13	---	---	---	---	---	5.6	0.128		
2,3,5,6TETRACHLOROPHENOL	95954	6.80	0.15	---	---	---	---	---	6.8	0.152		
2,4,5TRICHLOROPHENOL	88062	18.40	0.41	---	---	---	---	---	18.4	0.408		
2,4,6TRINITROPHENOL	1330207	3388.00	75.20	---	---	---	---	---	3388	75.2		
XYLENE		106.40	2.40						106.4	2.4		

Facility Name: *Sneech Pond WTP*

RIPDES Permit #: *RI0023884*

Outfall #: *002A*

NOTE: METALS LIMITS ARE TOTAL METALS

Parameter	CAS #	Concentration Limits (ug/L) Based on WQ Criteria		Antideg. Limits (ug/L)	Ave PPS Data (ug/L) and Ap. Data (ug/L)		Ave. DMR Data (ug/L) 1/14-12/18		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	MO Ave
PRIORITY POLLUTANTS												
TOXIC METALS AND CYANIDE												
ANTIMONY	7440360	360.00	4.48	---	---	---	---	---	360	4.48		
ARSENIC (limits are total recoverable)	7440382	272.00	0.14	---	---	---	---	---	272	0.144		
ASBESTOS	1332214	No Criteria	5600000.00	---	---	---	---	---	---	5600000		
BERYLLIUM	7440417	6.00	0.14	---	---	---	---	---	6	0.136		
CADMIUM (limits are total recoverable)	7440439	0.42	0.08	---	---	---	---	---	0.41776521	0.077515416		
CHROMIUM III (limits are total recoverable)	16065831	463.46	22.15	---	---	---	---	---	463.457992	22.15173337		
CHROMIUM VI (limits are total recoverable)	18540299	13.03	9.15	---	---	---	---	---	13.0346232	9.147609148		
COPPER (limits are total recoverable)	7440508	3.03	2.28	---	---	---	---	---	3.03339135	2.282761378		
CYANIDE	57125	17.60	4.16	---	---	---	---	---	17.6	4.16		
LEAD (limits are total recoverable)	7439921	11.18	0.44	---	---	---	---	---	11.1840133	0.435824942		
MERCURY (limits are total recoverable)	7439976	1.32	0.13	---	---	---	---	---	1.31764706	0.131764706		
NICKEL (limits are total recoverable)	7440020	116.17	12.92	---	---	---	---	---	116.166603	12.91546456		
SELENIUM (limits are total recoverable)	7782492	16.00	4.00	---	---	---	---	---	16	4		
SILVER (limits are total recoverable)	7440224	0.30	No Criteria	---	---	---	---	---	0.2991898	0.299189798		
THALLIUM	7440280	36.80	0.19	---	---	---	---	---	36.8	0.192		
ZINC (limits are total recoverable)	7440666	29.61	29.61	---	---	---	---	---	29.6128958	29.61289579		
VOLATILE ORGANIC COMPOUNDS												
ACROLEIN	107028	2.32	0.05	---	---	---	---	---	2.32	0.048		
ACRYLONITRILE	107131	302.40	0.41	---	---	---	---	---	302.4	0.408		
BENZENE	71432	212.00	4.72	---	---	---	---	---	212	4.72		
BROMOFORM	75252	1172.00	26.40	---	---	---	---	---	1172	26.4		
CARBON TETRACHLORIDE	56235	1092.00	1.84	---	---	---	---	---	1092	1.84		
CHLOROBENZENE	108907	636.00	14.40	---	---	---	---	---	636	14.4		
CHLORODIBROMOMETHANE	124481	No Criteria	3.20	---	---	---	---	---	---	3.2		
CHLOROFORM	67663	1156.00	25.60	---	2.9	2.9	---	---	1156	25.6	N	N
DICHLOROBROMOMETHANE	75274	No Criteria	4.40	---	1.5	1.5	---	---	---	4.4	N	N
1,2DICHLOROETHANE	107062	4720.00	3.04	---	---	---	---	---	4720	3.04		

1,1DICHLOROETHYLENE	75354	464.00	10.40	---	---	---	---	---	464	10.4		
1,2DICHLOROPROPANE	78875	2100.00	4.00	---	---	---	---	---	2100	4		
1,3DICHLOROPROPYLENE	542756	No Criteria	0.27	---	---	---	---	---	---	0.272		
ETHYLBENZENE	100414	1280.00	28.80	---	---	---	---	---	1280	28.8		
BROMOMETHANE (methyl bromide)	74839	No Criteria	37.60	---	---	---	---	---	---	37.6		
CHLOROMETHANE (methyl chloride)	74873	No Criteria	0.00	---	---	---	---	---	---	0		
METHYLENE CHLORIDE	75092	7720.00	36.80	---	---	---	---	---	7720	36.8		
1,1,2,2TETRACHLOROETHANE	79345	372.80	1.36	---	---	---	---	---	372.8	1.36		
TETRACHLOROETHYLENE	127184	192.00	4.24	---	---	---	---	---	192	4.24		
TOLUENE	108883	508.00	11.20	---	---	---	---	---	508	11.2		
1,2TRANSDICHLOROETHYLENE	156605	No Criteria	112.00	---	---	---	---	---	---	112		
1,1,1TRICHLOROETHANE	71556	No Criteria	0.00	---	---	---	---	---	---	0		
1,1,2TRICHLOROETHANE	79005	720.00	4.72	---	---	---	---	---	720	4.72		
TRICHLOROETHYLENE	79016	1560.00	20.00	---	---	---	---	---	1560	20		
VINYL CHLORIDE	75014	No Criteria	0.02	---	---	---	---	---	---	0.02		
ACID ORGANIC COMPOUNDS		0.00	0.00									
2CHLOROPHENOL	95578	103.20	2.32	---	---	---	---	---	103.2	2.32		
2,4DICHLOROPHENOL	120832	80.80	1.76	---	---	---	---	---	80.8	1.76		
2,4DIMETHYLPHENOL	105679	84.80	1.92	---	---	---	---	---	84.8	1.92		
4,6DINITRO2METHYL PHENOL	534521	No Criteria	10.40	---	---	---	---	---	---	10.4		
2,4DINITROPHENOL	51285	24.80	0.55	---	---	---	---	---	24.8	0.552		
4NITROPHENOL	88755	No Criteria	0.00	---	---	---	---	---	---	0		
PENTACHLOROPHENOL	87865	0.05	0.04	---	---	---	---	---	0.0465529	0.035715661		
PHENOL	108952	200.80	4.48	---	---	---	---	---	200.8	4.48		
2,4,6TRICHLOROPHENOL	88062	12.80	0.29	---	---	---	---	---	12.8	0.288		
BASE NEUTRAL COMPOUNDS		0.00	0.00									
ACENAPHTHENE	83329	68.00	1.52	---	---	---	---	---	68	1.52		
ANTHRACENE	120127	No Criteria	6640.00	---	---	---	---	---	---	6640		
BENZIDINE	92875	No Criteria	0.00	---	---	---	---	---	---	0.000688		
POLYCYCLIC AROMATIC HYDROCARBONS		No Criteria	0.03	---	---	---	---	---	---	0.0304		
BIS(2CHLOROETHYL)ETHER	111444	No Criteria	0.24	---	---	---	---	---	---	0.24		
BIS(2CHLOROISOPROPYL)ETHER	108601	No Criteria	1120.00	---	---	---	---	---	---	1120		
BIS(2ETHYLHEXYL)PHTHALATE	117817	444.00	9.60	---	---	---	---	---	444	9.6		
BUTYL BENZYL PHTHALATE	85687	68.00	1.52	---	---	---	---	---	68	1.52		
2CHLORONAPHTHALENE	91587	No Criteria	800.00	---	---	---	---	---	---	800		
1,2DICHLOROBENZENE	95501	63.20	1.44	---	---	---	---	---	63.2	1.44		
1,3DICHLOROBENZENE	541731	312.00	6.96	---	---	---	---	---	312	6.96		
1,4DICHLOROBENZENE	106467	44.80	0.96	---	---	---	---	---	44.8	0.96		
3,3DICHLOROBENZIDENE	91941	No Criteria	0.17	---	---	---	---	---	---	0.168		
DIETHYL PHTHALATE	84662	2084.00	46.40	---	---	---	---	---	2084	46.4		

DIMETHYL PHTHALATE	131113	1320.00	29.60	---	---	---	---	---	1320	29.6	
DInBUTYL PHTHALATE	84742	No Criteria	1600.00	---	---	---	---	---	---	1600	
2,4DINITROTOLUENE	121142	1240.00	0.88	---	---	---	---	---	1240	0.88	
1,2DIPHENYLHYDRAZINE	122667	11.20	0.25	---	---	---	---	---	11.2	0.248	
FLUORANTHENE	206440	159.20	3.52	---	---	---	---	---	159.2	3.52	
FLUORENE	86737	No Criteria	880.00	---	---	---	---	---	---	880	
HEXACHLOROBENZENE	118741	No Criteria	0.00	---	---	---	---	---	---	0.00224	
HEXACHLOROBUTADIENE	87683	No Criteria	3.52	---	---	---	---	---	---	3.52	
HEXACHLOROCYCLOPENTADIENE	77474	0.28	0.01	---	---	---	---	---	0.28	0.0064	
HEXACHLOROETHANE	67721	39.20	0.88	---	---	---	---	---	39.2	0.88	
ISOPHORONE	78591	4680.00	104.00	---	---	---	---	---	4680	104	
NAPHTHALENE	91203	92.00	2.08	---	---	---	---	---	92	2.08	
NITROBENZENE	98953	1080.00	13.60	---	---	---	---	---	1080	13.6	
NNITROSODIMETHYLAMINE	62759	No Criteria	0.01	---	---	---	---	---	---	0.00552	
NNITROSODINPROPYLAMINE	621647	No Criteria	0.04	---	---	---	---	---	---	0.04	
NNITROSODIPHENYLAMINE	86306	234.40	5.20	---	---	---	---	---	234.4	5.2	
PYRENE	129000	No Criteria	664.00	---	---	---	---	---	---	664	
1,2,4trichlorobenzene	120821	60.00	1.36	---	---	---	---	---	60	1.36	
PESTICIDES/PCBs											
ALDRIN	309002	2.40	0.00	---	---	---	---	---	2.4	0.000392	
Alpha BHC	319846	No Criteria	0.02	---	---	---	---	---	---	0.0208	
Beta BHC	319857	No Criteria	0.07	---	---	---	---	---	---	0.0728	
Gamma BHC (Lindane)	58899	0.76	0.76	---	---	---	---	---	0.76	0.76	
CHLORDANE	57749	1.92	0.00	---	---	---	---	---	1.92	0.00344	
4,4DDT	50293	0.88	0.00	---	---	---	---	---	0.88	0.0008	
4,4DDE	72559	No Criteria	0.00	---	---	---	---	---	---	0.00176	
4,4DDD	72548	No Criteria	0.00	---	---	---	---	---	---	0.00248	
DIELDRIN	60571	0.19	0.00	---	---	---	---	---	0.192	0.000416	
ENDOSULFAN (alpha)	959988	0.18	0.04	---	---	---	---	---	0.176	0.0448	
ENDOSULFAN (beta)	33213659	0.18	0.04	---	---	---	---	---	0.176	0.0448	
ENDOSULFAN (sulfate)	1031078	No Criteria	49.60	---	---	---	---	---	---	49.6	
ENDRIN	72208	0.07	0.03	---	---	---	---	---	0.0688	0.0288	
ENDRIN ALDEHYDE	7421934	No Criteria	0.23	---	---	---	---	---	---	0.232	
HEPTACHLOR	76448	0.42	0.00	---	---	---	---	---	0.416	0.000632	
HEPTACHLOR EPOXIDE	1024573	0.42	0.00	---	---	---	---	---	0.416	0.000312	
POLYCHLORINATED BIPHENYLS3	1336363	No Criteria	0.00	---	---	---	---	---	---	0.000512	
2,3,7,8TCDD (Dioxin)	1746016	No Criteria	0.00	---	---	---	---	---	---	0.00000004	
TOXAPHENE	8001352	0.58	0.00	---	---	---	---	---	0.584	0.00016	
TRIBUTYLTIN		0.37	0.06						0.368	0.0576	
NON PRIORITY POLLUTANTS:											

OTHER SUBSTANCES												
ALUMINUM (limits are total recoverable)	7429905	600.00	69.60	---	23400	9450	36	21	600	69.6	Y	Y
AMMONIA (winter)	7664417	8080.00	1216.00	---	---	---	---	---	8080	1216		
AMMONIA (summer)		8080.00	1216.00	---	---	---	---	---	8080	1216		
4BROMOPHENYL PHENYL ETHER	16887006	14.40	0.32	---	---	---	---	---	14.4	0.32		
CHLORIDE	7782505	688000.00	184000.00						688000	184000		
CHLORINE		19.00	11.00	---	1570	450	529	436	19	11	Y	Y
4CHLORO2METHYLPHENOL		12.00	0.26	---	---	---	---	---	12	0.256		
1CHLORONAPHTHALENE	106489	64.00	1.44	---	---	---	---	---	64	1.44		
4CHLOROPHENOL		153.60	3.44	---	---	---	---	---	153.6	3.44		
2,4DICHLORO6METHYLPHENOL		17.60	0.38	---	---	---	---	---	17.6	0.384		
1,1DICHLOROPROPANE	142289	920.00	20.80	---	---	---	---	---	920	20.8		
1,3DICHLOROPROPANE		242.40	5.36	---	---	---	---	---	242.4	5.36		
2,3DINITROTOLUENE		13.60	0.30	---	---	---	---	---	13.6	0.296		
2,4DINITRO6METHYL PHENOL	7439896	9.60	0.21	---	---	---	---	---	9.6	0.208		
IRON	608935	No Criteria	240.00		5310	2024			---	240		Y
pentachlorobenzene		10.40	0.22	---	---	---	---	---	10.4	0.224		
PENTACHLOROETHANE		289.60	6.40	---	---	---	---	---	289.6	6.4		
1,2,3,5tetrachlorobenzene	630206	256.80	5.68	---	---	---	---	---	256.8	5.68		
1,1,1,2TETRACHLOROETHANE	58902	784.00	17.60	---	---	---	---	---	784	17.6		
2,3,4,6TETRACHLOROPHENOL		5.60	0.13	---	---	---	---	---	5.6	0.128		
2,3,5,6TETRACHLOROPHENOL	95954	6.80	0.15	---	---	---	---	---	6.8	0.152		
2,4,5TRICHLOROPHENOL	88062	18.40	0.41	---	---	---	---	---	18.4	0.408		
2,4,6TRINITROPHENOL	1330207	3388.00	75.20	---	---	---	---	---	3388	75.2		
XYLENE		106.40	2.40						106.4	2.4		

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: December 18, 2019

PUBLIC NOTICE NUMBER: PN 19-09

DRAFT RIPDES PERMITS

RIPDES PERMIT NUMBER: RI0023884

NAME AND MAILING ADDRESS OF APPLICANT:

Town of Cumberland Water Department
98 Nate Whipple Highway
Cumberland, RI 02864

NAME AND ADDRESS OF FACILITY WHERE DISCHARGE OCCURS:

Sneech Pond Water Treatment Facility
76 Nate Whipple Highway
Cumberland, RI 02864

RECEIVING WATER: Sneech Pond (water body ID #: **RI0001005L-01**)

RECEIVING WATER CLASSIFICATION: AA

The facility which is the source of the effluent discharge is engaged in the production of drinking water. The discharge is composed of sedimentation basin decant and filter backwash water. This permit authorizes the discharges that were previously authorized by a July 27, 2011 permit. Permit limits have been maintained and new permit limits have been added to be protective of water quality in the receiving water. DEM intends to enter into a Consent Agreement that will include a compliance schedule for the facility to come into compliance with its RIPDES permit limits.

FURTHER INFORMATION:

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

Samuel Kaplan, P.E.
Environmental Engineer II
Rhode Island Department of Environmental Management
Office of Water Resources
235 Promenade Street
Providence, Rhode Island 02908-5767
(401) 222-4700 ext. 7046
Email: samuel.kaplan@dem.ri.gov

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

PUBLIC COMMENT AND REQUEST FOR PUBLIC HEARING:

Pursuant to Chapter 42-17.4 of the Rhode Island General Laws a public hearing has been scheduled to consider these permits if requested. Requests for a Public Hearing must be submitted in writing to the attention of 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 4:00 PM on Tuesday, January 28, 2020, a public hearing will be held at the following time and place:

5:00 PM Thursday, January 30, 2020
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 at least three (3) business days prior to the meeting so arrangements can be made to provide such assistance at no cost to the person requesting.

Interested parties may submit comments on the permit actions and the administrative record to the address above no later than 4:00PM on Friday, January 31, 2020.

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-150-10-1.42. The public comment period is from Wednesday, December 18, 2019 to Friday, January 31, 2020. Commenters may request a longer comment period if necessary to provide a reasonable opportunity to comply with these requirements. Comments should be directed to DEM as noted above.

FINAL DECISION AND APPEALS:

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

12/13/19
Date

Joseph B. Haberek, P.E.
Environmental Engineer IV
RIPDES, Office of Water Resources
Department of Environmental Management