



CITY OF PORTSMOUTH

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John P. Bohenko
City Manager

November 22, 2019

US EPA: Attn Shelly Puleo
Office of Ecosystem Protection
5 Post Office Square, Suite 100
Boston, MA 02109-3912

Re: NPDES Permit No. NH0090000 – Reapplication
City of Portsmouth, Pease Wastewater Treatment Facility
Portsmouth, New Hampshire

Dear Ms. Puleo:

The City is in receipt of the EPA comments provided in your letter dated October 22, 2019. The City requested our consulting engineer, Underwood Engineers, Inc., provide responses to those comments and they are submitted below via this letter. Responses are in *italics*.

Form 2A

Item A.12. Effluent Testing Information

ML/MDL was not provided for BOD₅, Fecal Coliform and TSS, as required.

The ML/MDL for total suspended solids (TSS) analysis is based upon the method blank analyzed alongside the TSS sample and therefore varies for each test. The laboratory has not performed a statistical analysis on its tests to determine a long-term ML/MDL. It is possible for the laboratory to record a zero value when a zero value is measured for TSS for both the sample and method blank, therefore the ML/MDL provided in the permit application is zero.

According to EPA guidance provided in "Definition and Procedure for the Determination of the Method Detection Limit, Rev. 2 (Attachment 1) the MDL does not apply to fecal coliform or BOD₅ methods. Underwood Engineers discussed this interpretation with EPA during the submission of a previous NPDES permit reapplication form (Attachment 2). Accordingly, these values were left blank.

Part D. Expanded Effluent Testing Data

Please clarify why certain pollutants in this section were not analyzed.

The missing pollutants have been added to Part D, and were initially identified as "not analyzed" because the analytical laboratory reported them using alternate names.

Certain laboratory methods for this section were updated to the methods used for analysis upon further review by Underwood Engineers.

Form 2S

Item A.8. Pollutant Concentrations

All pollutants in this section must be tested.

The Pease WWTF current sludge disposal practice is disposal in a municipal solid waste landfill which requires monitoring to determine whether the sludge is a hazardous waste. The testing methods required in order to dispose dewatered sludge to the municipal solid waste landfill are the Toxicity Characteristic Leaching Procedure (TCLP) and the Paint Filter (free liquid) test. Recent test results are included as Attachment F to the permit application as specified in Item B.10.g. Copper, Molybdenum, Nickel, and Zinc analyses are not required for this disposal practice and therefore were not performed.

CZM

Please provide the Coastal Zone Management Consistency letter. Your application cannot be considered complete without the submittal of this letter.

The Coastal Zone Management Consistency letter is provided as Attachment G to the revised application. At the request of the New Hampshire Coastal Program (NHCP), the consistency letter addresses the updated NHCP enforceable policies effective October 29, 2019.

The City has enclosed only those pages in the submittal that have changed. We trust the information provided meets EPA requirements for review. Please contact Underwood Engineers at (603) 436-6192 if there are any questions.

Very truly yours,



John P. Bohenko
City Manager

encl.

cc: Tracy Wood, P.E., NHDES w/ encl.
David Mullen, Director, Pease Development Authority w/ encl.
Terry Desmarais, P.E., City Engineer w/ encl.
Steve Clifton, P.E., Underwood Engineers, Inc. w/ encl.
Christian Williams, NH Coastal Program w/ encl.

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FACILITY NAME AND PERMIT NUMBER:

Form Approved 1/14/99
OMB Number 2040-0086

Pease Wastewater Treatment Facility, NH0090000

A.11. Description of Treatment.

- a. What levels of treatment are provided? Check all that apply.

☒ Primary ☒ Secondary
☐ Advanced ☐ Other. Describe: Sequencing Batch Reactor

- b. Indicate the following removal rates (as applicable):

Design BOD₅ removal or Design CBOD₅ removal 90.00 %
 Design SS removal 90.00 %
 Design P removal _____ %
 Design N removal _____ %
 Other _____ %

- c. What type of disinfection is used for the effluent from this outfall? If disinfection varies by season, please describe.

Chlorination (hypochlorite)If disinfection is by chlorination, is dechlorination used for this outfall? ☒ Yes ☐ No

- d. Does the treatment plant have post aeration?
- ☐
- Yes
- ☒
- No

A.12. Effluent Testing Information. All Applicants that discharge to waters of the US must provide effluent testing data for the following parameters. Provide the indicated effluent testing required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. At a minimum, effluent testing data must be based on at least three samples and must be no more than four and one-half years apart.

Outfall number: 005

PARAMETER	MAXIMUM DAILY VALUE		AVERAGE DAILY VALUE		
	Value	Units	Value	Units	Number of Samples
pH (Minimum)	6.70	s.u.			
pH (Maximum)	7.82	s.u.			
Flow Rate	1.32	MGD	0.58	MGD	1,180.00
Temperature (Winter)	21.90	deg C	16.00	deg C	610.00
Temperature (Summer)	28.40	deg C	23.60	deg C	523.00

* For pH please report a minimum and a maximum daily value

POLLUTANT	MAXIMUM DAILY DISCHARGE		AVERAGE DAILY DISCHARGE			ANALYTICAL METHOD	ML / MDL
	Conc.	Units	Conc.	Units	Number of Samples		

CONVENTIONAL AND NONCONVENTIONAL COMPOUNDS.

BIOCHEMICAL OXYGEN DEMAND (Report one)	BOD-5	51.00	mg/L	8.50	mg/L	330.00	SM 5210B	N/A
	CBOD-5							
FECAL COLIFORM		62.70		1.97		1,144.00	SM 9222 D	N/A
TOTAL SUSPENDED SOLIDS (TSS)		76.70	mg/L	8.00	mg/L	322.00	SM 2540	0

END OF PART A.

REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE

FACILITY NAME AND PERMIT NUMBER:
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SUPPLEMENTAL APPLICATION INFORMATION

PART D. EXPANDED EFFLUENT TESTING DATA

Refer to the directions on the cover page to determine whether this section applies to the treatment works.

Effluent Testing: 1.0 mgd and Pretreatment Treatment Works. If the treatment works has a design flow greater than or equal to 1.0 mgd or it has (or is required to have) a pretreatment program, or is otherwise required by the permitting authority to provide the data, then provide effluent testing data for the following pollutants. Provide the indicated effluent testing information and any other information required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analyses conducted using 40 CFR Part 136 methods. In addition, these data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. Indicate in the blank rows provided below any data you may have on pollutants not specifically listed in this form. At a minimum, effluent testing data must be based on at least three pollutant scans and must be no more than four and one-half years old.

See Attachment C
 Outfall number: 005 (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/ MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
METALS (TOTAL RECOVERABLE), CYANIDE, PHENOLS, AND HARDNESS.											
ANTIMONY	0.315	ug/L	0.00169	lb/d	0.23	ug/L	0.0014	lb/d	4	EPA 200.8	0.2/0.009
ARSENIC	4.63	ug/L	0.03672	lb/d	4.63	ug/L	0.0256	lb/d	4	EPA 200.8	0.3/0.1
BERYLLIUM	0.004	ug/L	0.00003	lb/d	0.004	ug/L	0.00003	lb/d	4	EPA 200.8	0.06/0.004
CADMIUM	0.118	ug/L	0.00094	lb/d	0.07	ug/L	0.00047	lb/d	4	EPA 200.8	0.02/0.008
CHROMIUM	0.730	ug/L	0.0047	lb/d	0.57	ug/L	0.0036	lb/d	4	EPA 200.8	0.1/0.02
COPPER	19.8	ug/L	0.139	lb/d	14.47	ug/L	0.0927	lb/d	4	EPA 200.8	0.1/0.02
LEAD	1.03	ug/L	0.0046	lb/d	0.44	ug/L	0.00247	lb/d	4	EPA 200.8	0.04/0.005
MERCURY	6.49	ug/L	0.0514	lb/d	4.24	ug/L	0.0295	lb/d	4	EPA 1631 E	0.5/0.08
NICKEL	8.31	ug/L	0.0372	lb/d	5.04	ug/L	0.0298	lb/d	4	EPA 200.8	0.1/0.04
SELENIUM	2.23	ug/L	0.0177	lb/d	1.62	ug/L	0.0107	lb/d	4	EPA 200.8	0.6/0.44
SILVER	0.030	ug/L	0.00024	lb/d	0.020	ug/L	0.00015	lb/d	4	EPA 200.8	0.02/0.002
THALLIUM	ND	ug/L	0.00005	lb/d	ND	ug/L	0.00004	lb/d	4	EPA 200.8	0.02/0.006
ZINC	117	ng/L	0.00093	lb/d	92.43	ng/L	0.0006	lb/d	4	EPA 200.8	0.5/0.16
CYANIDE	0.012	mg/L	0.056	lb/d	0.0083	mg/L	0.051	lb/d	4	SM 4500-CN E	0.02/0.007
TOTAL PHENOLIC COMPOUNDS	ND	mg/L	ND	LB/D	ND	mg/L	ND	LB/D	4	EPA 420.1	0.05
HARDNESS (AS CaCO3)	600	mg/L	1,118	LB/D	230	mg/L	5,721	LB/D	11	SM 2340	1

Use this space (or a separate sheet) to provide information on other metals requested by the permit writer.

FACILITY NAME AND PERMIT NUMBER:

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OMB Number 2040-0086

Pease Wastewater Treatment Facility, NH0090000

Outfall number: _____ (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/ MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
VOLATILE ORGANIC COMPOUNDS.											
ACROLEIN	<10	ug/L	<0.0793	lb/d	<10	ug/L	<0.0642	lb/d	4	EPA 624	10
ACRYLONITRILE	<10	ug/L	<0.0793	lb/d	<10	ug/L	<0.0642	lb/d	4	EPA 624	10
BENZENE	<2	ug/L	<0.0159	lb/d	<2	ug/L	<0.0129	lb/d	4	EPA 624	2
BROMOFORM	2.2	ug/L	0.0108	lb/d	2.05	ug/L	0.0103	lb/d	4	EPA 624	2
CARBON TETRACHLORIDE	<2	ug/L	<0.0108	lb/d	<2	ug/L	<0.0129	lb/d	4	EPA 624	2
CLOROBENZENE	<2	ug/L	<0.0108	lb/d	<2	ug/L	<0.0129	lb/d	4	EPA 624	2
CHLORODIBROMO-METHANE	24	ug/L	0.107	lb/d	14.65	ug/L	0.102	lb/d	4	EPA 624	2
CHLOROETHANE	<2	ug/L	<0.0107	lb/d	<2	ug/L	<0.0129	lb/d	4	EPA 624	2
2-CHLORO-ETHYL VINYL ETHER	<4	ug/L	<0.0317	lb/d	<4	ug/L	<0.0257	lb/d	4	EPA 624	4
CHLOROFORM	92	ug/L	0.495	lb/d	64.3	ug/L	0.395	lb/d	4	EPA 624	2
DICHLOROBROMO-METHANE	24	ug/L	0.107	lb/d	14.7	ug/L	0.102	lb/d	4	EPA 624	2
1,1-DICHLOROETHANE	<2	ug/L	<0.0158	lb/d	<2	ug/L	<0.0129	lb/d	4	EPA 624	2
1,2-DICHLOROETHANE	<2	ug/L	<0.0158	lb/d	<2	ug/L	<0.0129	lb/d	4	EPA 624	2
TRANS-1,2-DICHLORO-ETHYLENE	<2	ug/L	<0.0159	lb/d	<2	ug/L	<0.0129	lb/d	4	EPA 624	2
1,1-DICHLOROETHYLENE	<2	ug/L	<0.0159	lb/d	<2	ug/L	<0.0129	lb/d	4	EPA 624	2
1,2-DICHLOROPROPANE	<2	ug/L	<0.0159	lb/d	<2	ug/L	<0.0129	lb/d	4	EPA 624	2
1,3-DICHLORO-PROPYLENE	<2	ug/L	<0.0159	lb/d	<2	ug/L	<0.0129	lb/d	4	EPA 624	2
ETHYLBENZENE	<2	ug/L	<0.0159	lb/d	<2	ug/L	<0.0129	lb/d	4	EPA 624	2
METHYL BROMIDE	<2	ug/L	<0.0159	lb/d	<2	ug/L	<0.0129	lb/d	4	EPA 624	2
METHYL CHLORIDE	<2	ug/L	<0.0159	lb/d	<2	ug/L	<0.0129	lb/d	4	EPA 624	2
METHYLENE CHLORIDE	<2	ug/L	<0.0159	lb/d	<2	ug/L	<0.0129	lb/d	4	EPA 624	2
1,1,2,2-TETRACHLORO-ETHANE	<2	ug/L	<0.0159	lb/d	<2	ug/L	<0.0129	lb/d	4	EPA 624	2
TETRACHLORO-ETHYLENE	<2	ug/L	<0.0159	lb/d	<2	ug/L	<0.0129	lb/d	4	EPA 624	2
TOLUENE	<2	ug/L	<0.0159	lb/d	<2	ug/L	<0.0129	lb/d	4	EPA 624	2

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Outfall number: _____ (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/ MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
1,1,1-TRICHLOROETHANE	<2	ug/L	<0.0159	lb/d	<2	ug/L	<0.0129	lb/d	4	EPA 624	2
1,1,2-TRICHLOROETHANE	<2	ug/L	<0.0159	lb/d	<2	ug/L	<0.0129	lb/d	4	EPA 624	2
TRICHLOROETHYLENE	<2	ug/L	<0.0159	lb/d	<2	ug/L	<0.0129	lb/d	4	EPA 624	2
VINYL CHLORIDE	<2	ug/L	<0.0159	lb/d	<2	ug/L	<0.0129	lb/d	4	EPA 624	2

Use this space (or a separate sheet) to provide information on other volatile organic compounds requested by the permit writer.

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ACID-EXTRACTABLE COMPOUNDS

P-CHLORO-M-CRESOL	<3	ug/L	<0.0238	lb/d	<3	ug/L	<0.0198	lb/d	4	EPA 625/8270	3
2-CHLOROPHENOL	<3	ug/L	<0.0238	lb/d	<3	ug/L	<0.0198	lb/d	4	EPA 625/8270	3
2,4-DICHLOROPHENOL	<3	ug/L	<0.0238	lb/d	<3	ug/L	<0.0198	lb/d	4	EPA 625/8270	3
2,4-DIMETHYLPHENOL	<3	ug/L	<0.0238	lb/d	<3	ug/L	<0.0198	lb/d	4	EPA 625/8270	3
4,6-DINITRO-O-CRESOL	<10	ug/L	<0.0793	lb/d	<10	ug/L	<0.0642	lb/d	4	EPA 625/8270	10
2,4-DINITROPHENOL	<5	ug/L	<0.0397	lb/d	<5	ug/L	<0.0321	lb/d	4	EPA 625/8270	5
2-NITROPHENOL	<3	ug/L	<0.0238	lb/d	<3	ug/L	<0.0198	lb/d	4	EPA 625/8270	3
4-NITROPHENOL	<3	ug/L	<0.0238	lb/d	<3	ug/L	<0.0198	lb/d	4	EPA 625/8270	3
PENTACHLOROPHENOL	<3	ug/L	<0.0238	lb/d	<3	ug/L	<0.0198	lb/d	4	EPA 625/8270	3
PHENOL	<3	ug/L	<0.0238	lb/d	<3	ug/L	<0.0198	lb/d	4	EPA 625/8270	3
2,4,6-TRICHLOROPHENOL	<3	ug/L	<0.0238	lb/d	<3	ug/L	<0.0198	lb/d	4	EPA 625/8270	3

Use this space (or a separate sheet) to provide information on other acid-extractable compounds requested by the permit writer.

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BASE-NEUTRAL COMPOUNDS.

ACENAPHTHENE	<3	ug/L	<0.0238	lb/d	<3	ug/L	<0.0198	lb/d	4	EPA 625/8270	3
ACENAPHTHYLENE	<3	ug/L	<0.0238	lb/d	<3	ug/L	<0.0198	lb/d	4	EPA 625/8270	3
ANTHRACENE	<3	ug/L	<0.0238	lb/d	<3	ug/L	<0.0198	lb/d	4	EPA 625/8270	3
BENZIDINE	<3	ug/L	<0.0238	lb/d	<3	ug/L	<0.0198	lb/d	4	EPA 625/8270	3
BENZO(A)ANTHRACENE	<3	ug/L	<0.0238	lb/d	<3	ug/L	<0.0198	lb/d	4	EPA 625/8270	3
BENZO(A)PYRENE	<3	ug/L	<0.0238	lb/d	<3	ug/L	<0.0198	lb/d	4	EPA 625/8270	3

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POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/ MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
3,4 BENZO-FLUORANTHENE	<3	ug/L	<0.0238	lb/d	<3	ug/L	<0.0198	lb/d	4	EPA 625/8270	3
BENZO(GH)PERYLENE	<3	ug/L	<0.0238	lb/d	<3	ug/L	<0.0198	lb/d	4	EPA 625/8270	3
BENZO(K)FLUORANTHENE	<3	ug/L	<0.0238	lb/d	<3	ug/L	<0.0198	lb/d	4	EPA 625/8270	3
BIS (2-CHLOROETHOXY) METHANE	<3	ug/L	<0.0238	lb/d	<3	ug/L	<0.0198	lb/d	4	EPA 625/8270	3
BIS (2-CHLOROETHYL)-ETHER	<3	ug/L	<0.0238	lb/d	<3	ug/L	<0.0198	lb/d	4	EPA 625/8270	3
BIS (2-CHLOROISO-PROPYL) ETHER	<3	ug/L	<0.0238	lb/d	<3	ug/L	<0.0198	lb/d	4	EPA 625/8270	3
BIS (2-ETHYLHEXYL) PHTHALATE	<3	ug/L	<0.0238	lb/d	<3	ug/L	<0.0198	lb/d	4	EPA 625/8270	3
4-BROMOPHENYL PHENYL ETHER	<3	ug/L	<0.0238	lb/d	<3	ug/L	<0.0198	lb/d	4	EPA 625/8270	3
BUTYL BENZYL PHTHALATE	<3	ug/L	<0.0238	lb/d	<3	ug/L	<0.0198	lb/d	4	EPA 625/8270	3
2-CHLORONAPHTHALENE	<3	ug/L	<0.0238	lb/d	<3	ug/L	<0.0198	lb/d	4	EPA 625/8270	3
4-CHLORPHENYL PHENYL ETHER	<3	ug/L	<0.0238	lb/d	<3	ug/L	<0.0198	lb/d	4	EPA 625/8270	3
CHRYSENE	<3	ug/L	<0.0238	lb/d	<3	ug/L	<0.0198	lb/d	4	EPA 625/8270	3
DI-N-BUTYL PHTHALATE	21	ug/L	0.166	lb/d	14.7	ug/L	0.113	lb/d	4	EPA 625/8270	3
DI-N-OCTYL PHTHALATE	<3	ug/L	<0.0238	lb/d	<3	ug/L	<0.0198	lb/d	4	EPA 625/8270	3
DIBENZO(A,H) ANTHRACENE	<3	ug/L	<0.0238	lb/d	<3	ug/L	<0.0198	lb/d	4	EPA 625/8270	3
1,2-DICHLOROBENZENE	<3	ug/L	<0.0238	lb/d	<3	ug/L	<0.0198	lb/d	4	EPA 625/8270	3
1,3-DICHLOROBENZENE	<3	ug/L	<0.0238	lb/d	<3	ug/L	<0.0198	lb/d	4	EPA 625/8270	3
1,4-DICHLOROBENZENE	<3	ug/L	<0.0238	lb/d	<3	ug/L	<0.0198	lb/d	4	EPA 625/8270	3
3,3-DICHLOROBENZIDINE	<3	ug/L	<0.0238	lb/d	<3	ug/L	<0.0198	lb/d	4	EPA 625/8270	3
DIETHYL PHTHALATE	<3	ug/L	<0.0238	lb/d	<3	ug/L	<0.0198	lb/d	4	EPA 625/8270	3
DIMETHYL PHTHALATE	<3	ug/L	<0.0238	lb/d	<3	ug/L	<0.0198	lb/d	4	EPA 625/8270	3
2,4-DINITROTOLUENE	<3	ug/L	<0.0238	lb/d	<3	ug/L	<0.0198	lb/d	4	EPA 625/8270	3
2,6-DINITROTOLUENE	<3	ug/L	<0.0238	lb/d	<3	ug/L	<0.0198	lb/d	4	EPA 625/8270	3
1,2-DIPHENYLHYDRAZINE	<3	ug/L	<0.0238	lb/d	<3	ug/L	<0.0198	lb/d	4	EPA 625/8270	3

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POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/ MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
FLUORANTHENE	<3	ug/L	<0.0238	lb/d	<3	ug/L	<0.0198	lb/d	4	EPA 625/8270	3
FLUORENE	<3	ug/L	<0.0238	lb/d	<3	ug/L	<0.0198	lb/d	4	EPA 625/8270	3
HEXACHLOROBENZENE	<3	ug/L	<0.0238	lb/d	<3	ug/L	<0.0198	lb/d	4	EPA 625/8270	3
HEXACHLOROBUTADIENE	<3	ug/L	<0.0238	lb/d	<3	ug/L	<0.0198	lb/d	4	EPA 625/8270	3
HEXACHLOROCYCLO-PENTADIENE	<3	ug/L	<0.0238	lb/d	<3	ug/L	<0.0198	lb/d	4	EPA 625/8270	3
HEXACHLOROETHANE	<3	ug/L	<0.0238	lb/d	<3	ug/L	<0.0198	lb/d	4	EPA 625/8270	3
INDENO(1,2,3-CD)PYRENE	<3	ug/L	<0.0238	lb/d	<3	ug/L	<0.0198	lb/d	4	EPA 625/8270	3
ISOPHORONE	<3	ug/L	<0.0238	lb/d	<3	ug/L	<0.0198	lb/d	4	EPA 625/8270	3
NAPHTHALENE	<3	ug/L	<0.0238	lb/d	<3	ug/L	<0.0198	lb/d	4	EPA 625/8270	3
NITROBENZENE	<3	ug/L	<0.0238	lb/d	<3	ug/L	<0.0198	lb/d	4	EPA 625/8270	3
N-NITROSODI-N-PROPYLAMINE	4.4	ug/L	<0.0238	lb/d	3.35	ug/L	0.0208	lb/d	4	EPA 625/8270	3
N-NITROSODI- METHYLAMINE	<3	ug/L	<0.0238	lb/d	<3	ug/L	<0.0198	lb/d	4	EPA 625/8270	3
N-NITROSODI-PHENYLAMINE	<3	ug/L	<0.0238	lb/d	<3	ug/L	<0.0198	lb/d	4	EPA 625/8270	3
PHENANTHRENE	<3	ug/L	<0.0238	lb/d	<3	ug/L	<0.0198	lb/d	4	EPA 625/8270	3
PYRENE	<3	ug/L	<0.0238	lb/d	<3	ug/L	<0.0198	lb/d	4	EPA 625/8270	3
1,2,4-TRICHLOROBENZENE	<3	ug/L	<0.0238	lb/d	<3	ug/L	<0.0198	lb/d	4	EPA 625/8270	3

Use this space (or a separate sheet) to provide information on other base-neutral compounds requested by the permit writer.

Use this space (or a separate sheet) to provide information on other pollutants (e.g., pesticides) requested by the permit writer.

END OF PART D.

REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE

FACILITY NAME AND PERMIT NUMBER:

Pease WWTF NH0090000

Form Approved 1/14/99
OMB Number 2040-0086

A.8. Pollution Concentrations: Using the table below or a separate attachment, provide sewage sludge monitoring data for the pollutants for which limits in sewage sludge have been established in 40 CFR Part 503 for this facility's expected use or disposal practices. All data must be based on three or more samples taken at least one month apart and must be no more than four and one-half years old.

POLLUTANT	CONCENTRATION (mg/kg dry weight)	ANALYTICAL METHOD	DETECTION LEVEL FOR ANALYSIS
ARSENIC	NOT REQUIRED	The facility disposes sludge in a municipal solid waste landfill. The monitoring required for this practice is TCLP and paint filter tests, which are provided in Attachment F.	
CADMIUM	NOT REQUIRED		
CHROMIUM	NOT REQUIRED		
COPPER	NOT REQUIRED		
LEAD	NOT REQUIRED		
MERCURY	NOT REQUIRED		
MOLYBDENUM	NOT REQUIRED		
NICKEL	NOT REQUIRED		
SELENIUM	NOT REQUIRED		
ZINC	NOT REQUIRED		

A.9. Certification. Read and submit the following certification statement with this application. Refer to the instructions to determine who is an officer for purposes of this certification. Indicate which parts of Form 2S you have completed and are submitting:

_____ Part 1 Limited Background Information packet

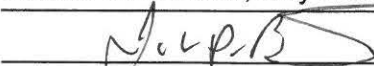
Part 2 Permit Application Information packet:

- ☒ Section A (General Information)
☒ Section B (Generation of Sewage Sludge or Preparation of a Material Derived from Sewage Sludge)
_____ Section C (Land Application of Bulk Sewage Sludge)
_____ Section D (Surface Disposal)
_____ Section E (Incineration)

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with the system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name and official title John P. Bohenko, City Manager

Signature



Date signed

11-19-19

Telephone number

(603) 610-7201

Upon request of the permitting authority, you must submit any other information necessary to assess sewage sludge use or disposal practices at your facility or identify appropriate permitting requirements.

SEND COMPLETED FORMS TO:

ATTACHMENT G

COASTAL ZONE CONSISTENCY CERTIFICATION



CITY OF PORTSMOUTH

City Hall, One Junkins Avenue
Portsmouth, New Hampshire 03801
jpb@cityofportsmouth.com
(603) 610-7201

John P. Bohenko
City Manager

November 22, 2019

Mr. Christian Williams
Program Coordinator
NH Coastal Program
Pease Field Office
222 International Drive
Portsmouth, New Hampshire 03801

Re: Coastal Zone Management Act Consistency Certification
NPDES Permit No. NH0090000
Portsmouth, New Hampshire

Dear Mr. Williams:

This document provides the New Hampshire Coastal Management Program (NHCP) with the City of Portsmouth, NH consistency certification and necessary data and information under CZMA § 307(c) (3)(A) and 15 CFR part 930, subpart D, for the City of Portsmouth NPDES permit renewal application.

Certification:

The City of Portsmouth, NH certifies that the proposed activity complies with the policies of the New Hampshire approved coastal zone management program and will be conducted in a manner consistent with such policies.

Necessary Data and Information:

1. In support of the Certification, the City of Portsmouth is providing responses to the New Hampshire Coastal Program Policies. The enclosed Consistency Determination includes an evaluation relating the probable coastal effects of the proposed project to the relevant enforceable policies.
2. The City of Portsmouth, NH seeks a National Pollution Discharge Elimination System permit renewal (Permit No. NH0090000) for the WWTF. Please refer to the NPDES Renewal Application submitted to the EPA dated June 21, 2019. The City is requesting that the permit be modified for an increase of the permitted flow of the WWTF from 1.2 Million Gallons per Day (MGD) to 1.77 MGD.

By this certification that the NPDES permit renewal is consistent with the NHCP, the NHCP is hereby notified that it has six months from the receipt of this letter and accompanying information in which to concur with or object to City of Portsmouth's certification. Pursuant to 15 CFR § 930.62(b), if the NHCP has not issued a decision within three months following commencement of its review, it shall notify the City of Portsmouth and EPA of the status of the matter and the basis for further delay. The NHCP's concurrence, objection or notification of review status shall be sent to:

Mr. Terry Desmarais, P.E., City Engineer
Department of Public Works
680 Peverly Hill Road
Portsmouth, New Hampshire 03801

US EPA
Attn: S. Puleo (OEP06-1)
Office of Ecosystem Protection
5 Post Office Square, Suite 100
Boston, MA 02109-3912

W. Steven Clifton, P.E., Vice President
Underwood Engineers, Inc.
25 Vaughan Mall
Portsmouth, NH 03801

Thank you for your assistance. Please call if you have any questions.

CITY OF PORTSMOUTH, NEW HAMPSHIRE

Very truly yours,

A handwritten signature in dark ink, appearing to read "John P. Bohenko", with a long horizontal line extending to the right.

John P. Bohenko
City Manager

**Consistency Determination
Pease WWTF, City of Portsmouth
NPDES Permit NH0090000
Portsmouth, New Hampshire
November 22, 2019**

I. New Hampshire Coastal Program Policies

NHDES contact

Christian Williams, Program Coordinator
NH Coastal Program, NHDES Pease Field Office
222 International Drive
Portsmouth, NH 03801
Phone: 603-559-0025
Fax: 603-559-1510
Email: christian.williams@des.nh.gov

Protection of Coastal Resources

- 1. Protect and preserve and, where appropriate, restore the water and related land resources and uses of the coastal and estuarine environments. The resources of primary concern are: coastal and estuarine waters, tidal and freshwater wetlands, beaches, sand dunes, and rocky shores;**

The National Pollution Discharge Elimination System (NPDES) permitting activity was authorized by the Clean Water Act (CWA), which is intended “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.” The CWA includes the provision that “it is the national goal that wherever attainable, an interim goal of water quality which provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water be achieved...” As such, the intent of the permitting activity is consistent with the coastal program policy to protect and preserve the State of New Hampshire water resources and environments and their related uses.

The City has submitted an anti-degradation sampling program for use by the New Hampshire Department of Environmental Services (NHDES) and Environmental Protection Agency (EPA) in preparing a modified NPDES Permit. The purpose of the antidegradation program is to evaluate the impact of an increased pollutant loading on the receiving waters capacity to continue to meet NHDES water quality and designated use criteria. The results of the anti-degradation study are used in the permitting activity to set discharge limits which protect and preserve water quality to meet the existing uses in the receiving stream.

The permitting activity also includes an anti-backsliding component, which prevents a permit to be renewed or modified with less stringent limitations than a previous permit and further protects the water quality and uses of the receiving stream.

The Pease WWTF provides treatment of domestic, and industrial wastewater. The treatment process uses two (2) clarifiers for primary treatment and two (2) sequencing batch reactors (SBRs) for secondary treatment for the removal of BOD₅ and TSS, as well as other processes. The City is currently constructing a new headworks facility at the Pease WWTF to improve preliminary treatment at the facility. Although a facility plan to meet the proposed increase in flow and load has not been completed, the City is planning for upgrades, including improvements to the secondary process which may include providing additional aeration capacity for the SBRs and, if necessary, construction of an additional SBR.

2. **Protect, manage, conserve and, where appropriate, undertake measures to maintain, restore, and enhance the fish and wildlife resources and related uses, including but not limited to commercial and recreational fishing, of the state;**

The City's continuing efforts to reduce impacts from wastewater discharges to coastal and estuarine waters have also been addressed as conserving fish and wildlife resources and the related uses in the same waters such as fishing, shellfishing, boating, and swimming.

The City and NHDES are performing a dye study to track the flow and dispersion of water from the Pease WWTF in the Piscataqua River downstream as well as upstream into the Little Bay area. Information from this study is being used by DES to determine what areas in the Upper and Lower Piscataqua River may be suitable for recreational shellfish harvest and for commercial shellfish aquaculture, while still protecting public health. Results of the dye study are pending.

3. **Regulate the mining of sand and gravel resources in offshore and onshore locations so as to ensure protection of submerged lands, and marine and estuarine life, and existing uses. Ensure adherence to minimum standards for restoring natural resources and uses impacted from onshore sand and gravel operations;**

Not applicable.

4. **Undertake oil spill prevention measures, safe oil handling procedures and, when necessary, expedite the cleanup of oil spillage that will contaminate public waters. Institute legal action to collect damages from liable parties in accordance with state law;**

Not applicable.

5. **Encourage investigations of the distribution, habitat needs, and limiting factors of rare and endangered animal species and undertake conservation programs to ensure their continued perpetuation;**

Not applicable.

6. **Identify, designate, and preserve unique and rare plant and animal species and geologic formations which constitute the natural heritage of the state. Encourage measures, including acquisition strategies, to ensure their protection;**

Not applicable.

Recreation and Public Access

7. **Provide a wide range of outdoor recreational opportunities including public access in the seacoast through the maintenance and improvement of the existing public facilities and the acquisition and development of new recreational areas and public access**

No activities are currently planned that will further restrict public access to the seacoast or restrict recreational opportunities.

Managing Coastal Development:

8. **Preserve the rural character and scenic beauty of the Great Bay estuary by limiting public investment in infrastructure within the coastal zone in order to limit development to a mixture of low and moderate density**

The investment in public infrastructure associated with this activity is intended to protect and restore the water, fish, and wildlife resources of the state as required by policies 1 and 2.

The Pease WWTF serves the Pease International Tradeport, which has the following dedicated type of use zones: Airport, Airport Industrial, Industrial, Business/Commercial, and Natural Resource Protection. The type of use or area for each zone will not be impacted by the permitting activity. The increase in permitted flow is to support industrial flows, and is not anticipated to support an overall increase in the density of development.

9. **Reduce the risk of flood loss, to minimize the impact of floods on human safety, health and welfare, and to preserve the natural and beneficial value of floodplains, through the implementation of the National Flood Insurance Program and applicable state laws and regulations, and local building codes and zoning ordinances;**

The Pease International Tradeport area has fully separated storm and sanitary sewers. The stormwater permits are regulated under separate NPDES permit numbers.

All treatment facilities within the Pease WWTF are above the FEMA 100-year

floodplain line.

10. **Maintain the air resources in the coastal area by ensuring that the ambient air pollution level, established by the New Hampshire State Implementation Plan pursuant to the Clean Air Act, as amended, is not exceeded;**

Not applicable

11. **Protect and preserve the chemical, physical, and biological integrity of coastal water resources, both surface and groundwater;**

The chemical, physical and biological integrity of both surface and groundwater are being protected through the permitting activities and the City's ongoing projects as described above (Q.1).

12. **Ensure that the siting of any proposed energy facility in the coast will consider the national interest and will not unduly interfere with the orderly development of the region and will not have an unreasonable adverse impact on aesthetics, historic sites, coastal and estuarine waters, air and water quality, the natural environment and the public health and safety, and existing uses;**

Not applicable

Coastal Dependent Uses:

13. **Allow only water dependent uses and structures on State properties in Portsmouth-Little Harbor, Rye Harbor, and Hampton-Seabrook Harbor, at the State Port Authority, the State Fish Pier and State beaches (except those uses or structures which directly support the public recreation purpose). For new development, allow only water dependent uses and structures over waters and wetlands of the State. Allow repair of existing over-water structures within guidelines. Encourage the siting of water dependent uses adjacent to public waters.**

Not Applicable

14. **Preserve and protect coastal and tidal waters and fish and wildlife resources from the adverse effects of dredging and dredge disposal, while ensuring the availability of navigable waters to coastal-dependent uses. Encourage beach renourishment and wildlife habit restoration as a means of dredge disposal whenever compatible.**

Not applicable.

Preservation of Historic and Cultural Resources:

- 15. Support the preservation, management, and interpretation of historic and culturally significant structures, sites and districts along the Atlantic coast and in the Great Bay area**

The City does not anticipate impacting any historic or culturally significant structures, sites or districts during upgrades to its wastewater facilities.

Marine and Estuarine Research and Education:

- 16. Promote and support marine and estuarine research and education that will directly benefit coastal resource management.**

Not applicable.