



PUBLIC WORKS DEPARTMENT

CITY OF PORTSMOUTH

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Portsmouth N.H. 03801

(603) 427-1530 FAX (603) 427-1539

VIA EMAIL

May 28, 2020

Mark Pollins
Director of Water Enforcement
USEPA
OECA
1200 Pennsylvania Ave NW
MAIL CODE 2246A
Washington, DC 20460

Re: Consent Decree 09-cv-283-PB
Monthly Report on Compliance for April 2020
City of Portsmouth, New Hampshire

Dear Mr. Pollins:

In accordance with Consent Decree 09-cv-283-PB, Section V, item paragraph 20, dated August 12, 2009 and as amended by Consent Decree Modification filed July 2, 2012 and approved by the Court on February 15, 2013 and as amended by Consent Decree Second Modification, Section III, item paragraph 6, filed on April 1, 2016 and approved by the Court on September 28, 2016 the City of Portsmouth is submitting this monthly report on compliance.

The Consent Decree Second Modification requires the filing of monthly reports as follows: Within 30 days after the end of each month, the City shall submit a written report to EPA, the State, and CLF for the preceding month that shall include a description or reporting of the following: i) status of required construction, including major work items completed in the preceding month; ii) projected work items to be undertaken in the next month; iii) project percent complete based on payments to Contractor for work completed; iv) project percent complete based on time elapsed; v) status of all required permit applications; vi) status of Consent Decree milestones including identifying any problems encountered or anticipated, together with the proposed or implemented solutions; and vii) the monthly average discharge concentrations of total nitrogen for the preceding month, as required in Paragraph 8.b.ii of the Second Modification.

The Consent Decree, First Modification, Second Modification and Third Modification along with such Monthly Reports on Compliance shall be posted on the City's internet site, and maintained accessible to the public online until termination of the Consent Decree. In addition to the submission of Reports on Compliance, the Parties will participate in quarterly meetings or conference calls, if scheduled by EPA, to review the City's compliance with the terms of the Consent Decree.

i. Status of required construction including major work items completed in the preceding month

Work completed by the Contractor in the month of **April 2020** is as follows:

- Completed installation of the sump at the Mechanical Room in the existing Sludge Processing Building (new Operations/Lab Building) lower level
- Completed application of liquid hardener on the floors in the BAF Building
- Completed installation of perimeter handrails on Gravity Thickener No. 2
- Completed installation of the waterproofing membrane and rigid insulation on the upper level of the Operations/Lab Building

ii. Projected work items to be undertaken in the next month

Ongoing work by the Contractor through the month of **May 2020** includes the following:

- Continue minor electrical, HVAC, and plumbing punch list work at the Headworks Building, Grit Building, Solids Building, and BAF Building
- Continue integration of the BAF control system with the plant's SCADA system
- Continue startup of the BAF and the biomass development phase, and continue to calibrate and tune control loops
- Continue to export excavated materials and demolition materials off-site
- Continue PCB encapsulation in the existing Sludge Processing Building (new Operations/Lab Building) lower level
- Continue structural steel baseplate installation on the first floor of the Operations/Lab Building
- Begin placement of concrete topping slab and containment curbs and pads at the Operations/Lab Building
- Continue construction of the brick shelf for the Operations/Lab Building brick façade
- Continue construction of ramps and stairs at the Operations/Lab Building
- Begin installation of structural steel, roof joists, and metal roof deck at the Operations/Lab Building
- Continue installation of CMU walls at the Operations/Lab Building lower level
- Begin installation of brick masonry façade at the Operations/Lab Building lower level
- Begin installation of metal stud walls at the Operations/Lab Building upper level
- Complete outstanding work and startup Gravity Thickener No. 2 mechanism
- Continue final grading, landscaping, and installation of the vegetated maintenance corridor
- Continue replacement of the exterior fencing

Important Note – The above list represents work that was scheduled for May 2020. Due to the Covid-19 pandemic and the impact of the declaration of states of emergency and issuance of executive orders, both at the state and federal level and guidance issued for social distancing, the work described above has been impacted to greater and lesser degrees depending on the trade involved. The consequences of these changes are still unfolding.

Projected work to be completed by the Contractor in the month of **May 2020** includes the following:

- Complete PCB encapsulation in the existing Sludge Processing Building (new Operations/Lab Building) lower level
- Complete construction of ramps and stairs at the Operations/Lab Building
- Complete structural steel baseplate installation on the first floor of the Operations/Lab Building
- Complete placement of concrete topping slab and containment curbs and pads at the Operations/Lab Building
- Complete outstanding work and startup Gravity Thickener No. 2

Important Note – The above list represents work that was scheduled for May 2020. Due to the Covid-19 pandemic and the impact of the declaration of states of emergency and issuance of executive orders, both at the state and federal level and guidance issued for social distancing, the work described above has been impacted to greater and lesser degrees depending on the trade involved. The consequences of these changes are still unfolding.

iii. Project percent complete based on payments to Contractor for work completed

The following table provides a summary of the Contractor's requests for payment, and the resulting percent complete:

Original Contract Value	72,785,545.00
Change Order 1 – January 2017	367,290.42
Change Order 2 – May 2017	546,722.46
Change Order 3 – August 2017	93,838.31
Change Order 4 – December 2017	162,869.20
Change Order 5 – May 2018	249,828.16
Change Order 6 – December 2018	292,031.11
Change Order 7 – April 2019	169,138.30
Change Order 8 – October 2019	112,659.75
Change Order 9 – May 2020	242,419.68
Contract Value Total	\$75,022,342.39

Payment Application No.	Work Conducted Through	Amount	Payment Application No. (continued)	Work Conducted Through (continued)	Amount	Cumulative Amount	% Complete Based on Contract Value Total
1	09/30/2016	\$1,393,500.00	23	07/31/2018	\$1,250,957.12		
2	10/31/2016	\$2,855,100.00	24	08/31/2018	\$2,351,471.12		
3	11/30/2016	\$1,717,330.09	25	09/30/2018	\$1,402,132.42		
4	12/31/2016	\$1,374,011.19	26	10/31/2018	\$1,382,568.22		
5	01/31/2017	\$1,524,496.35	27	11/30/2018	\$1,655,719.55		
6	02/28/2017	\$1,327,078.04	28	12/31/2018	\$1,409,179.62		
7	03/31/2017	\$2,767,152.62	29	01/31/2019	\$906,134.53		
8	04/30/2017	\$2,449,209.70	30	02/28/2019	\$902,482.79		
9	05/31/2017	\$1,876,920.03	31	03/31/2019	\$1,198,046.56		
10	06/30/2017	\$2,345,659.10	32	04/30/2019	\$1,138,709.83		
11	07/31/2017	\$2,242,655.50	33	05/31/2019	\$990,898.97		
12	08/31/2017	\$4,028,468.63	34	06/30/2019	\$1,112,297.85		
13	09/30/2017	\$2,757,371.30	35	07/31/2019	\$862,001.79		
14	10/31/2017	\$2,306,338.15	36	08/31/2019	\$1,068,359.68		
15	11/30/2017	\$1,884,478.12	37	09/30/2019	\$763,764.66		
16	12/31/2017	\$2,151,295.60	38	10/31/2019	\$1,151,181.27		
17	01/31/2018	\$1,621,113.58	39	11/30/2019	\$1,953,458.46		
18	02/28/2018	\$1,218,795.24	40	12/31/2019	\$1,319,747.16		
19	03/31/2018	\$1,737,412.52	41	01/31/2020	\$260,271.98		
20	04/30/2018	\$1,546,079.40	42	02/29/2020	\$410,670.38		
21	05/30/2018	\$1,428,583.12	43	03/31/2020	\$434,912.44		
22	06/30/2018	\$2,638,097.36	44	04/30/2020	\$727,280.47		
						\$69,843,392.51	93.10%

Project percent complete based on time elapsed

The contract time to the EPA required milestone for the BAF treatment system completion is 1186 calendar days. The total value of the contract (item iii) is based on the City's contractual milestone for project substantial completion is 1398 calendar days.

The BAF treatment substantial completion was achieved on December 31, 2019. As of April 30, 2020 the project is 93.6% complete based on the project substantial completion date of June 30, 2020. The Contractor's most recent schedule update showed a project substantial completion date in December 2020. The City is working with the Contractor to review the schedule. Any adjustments to the project substantial completion date will not impact any Consent Decree milestones.

iv. Status of all required permit applications

There are no pending permit applications.

v. Status of Consent Decree milestones including identifying any problems encountered or anticipated, together with the proposed or implemented solutions

The construction contract with Methuen Construction Company, Inc. was executed on August 25, 2016. A summary of all milestones required by the Consent Decree Second Modification is provided in the table below.

Milestone	Date	Status
Execute Contract to Construct Upgrades	July 1, 2016 September 1, 2016*	August 25, 2016
Submit Two Additional Milestones for EPA Review and Approval	December 1, 2016	November 29, 2016
Additional Milestone 1: Transfer of the existing SCADA system to the new Headworks Building	November 21, 2017	October 18, 2017
Additional Milestone 2: Startup and testing of the Secondary Influent Pump Station in the new Solids Building	May 9, 2019	May 7, 2019
BAF Substantial Completion	December 1, 2019 December 31, 2019	December 31, 2019**
Achieve Compliance with NPDES Permit Limits	April 1, 2020	April 1, 2020***

* At the request of the City of Portsmouth, all parties agreed that the Contract Execution Date could be revised to September 1, 2016 to allow more time for bidding and to accommodate the Portsmouth City Council's review of barging alternatives prior to contract execution. The Contractor's schedule for completion was reduced to accommodate the modified contract execution delay.

** The BAF substantial completion date was extended by approval from the EPA in a letter dated December 9, 2019. Documentation is provided in the December 2019 Monthly Report on Compliance and available online.

*** On May 15, 2020 the City filed its first Discharge Monitoring Report (DMR) with the EPA for the upgraded Peirce Island WWTF establishing compliance with the 2007 NPDES permit limits as required by the Consent Decree. That report is attached to this report. Data is collected twice weekly during the month, analyzed, and then reported electronically by the 15th of the following month.

vi. The monthly average discharge concentrations of total nitrogen for the preceding month, as required in Paragraph 8.b.ii of the Second Modification.

The average concentration of effluent total nitrogen in the month of April 2020 was 11.6 mg/L TN. The report is attached and was submitted with the City's Discharge Monitoring Report (DMR) for NPDES Permit NH0100234.

As requested by the EPA, Consent Decree Mitigations, as required in Section IV, Paragraph 8, of the Consent Decree Second Modification, will be outlined in this monthly report.

ATTACHMENT A: A summary of the City's mitigation initiatives is provided detailing the status of each initiative.

ATTACHMENT A1: A summary of the City's commitments to date as required in Paragraph 8.e., Water Quality and Ecosystem Health Project, of the Consent Decree Second Modification.

ATTACHMENT A2: Supplemental Compliance Plan Sewer Separation Projects per Consent Decree, Section IV, Paragraph 12.c. On January 24, 2018, EPA, with NHDES concurrence, approved the updated CSO Supplemental Compliance Plan and implementation schedule as contained in the plan.

These monthly construction reports are posted on the City's wastewater website at:
<https://www.cityofportsmouth.com/publicworks/wastewater/resources>

As required by the Consent Decree:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a 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 submitted 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. Please contact me at (603) 766-1416 if you have any questions or require additional information.

Sincerely,

A handwritten signature in black ink, appearing to read "Peter H. Rice", with a long horizontal flourish extending to the right.

Peter H. Rice, P.E.
Director of Public Works

cc: Solanch S. Pastrana-Del Valle, U.S. EPA Region 1
Tracy L. Wood, NHDES Wastewater Engineering Bureau Administrator
Allen Brooks, Esq., Department of Justice, Environmental Protection Bureau Chief
Tonia Bandrowicz, Senior Enforcement Counsel, USEPA Region 1
David Gordon, Esq., U.S. Department of Justice
Tom Irwin, Esq., Conservation Law Foundation
Karen S. Conard, City Manager, City of Portsmouth
Nancy Colbert Puff, Deputy City Manager
Suzanne Woodland, Deputy City Attorney
Brian Goetz, Deputy Director of Public Works
Terry Desmarais, City Engineer

ATTACHMENT A: MITIGATION

This document summarizes the City's mitigation initiatives as required in Section IV, Paragraph 8, of the Consent Decree Second Modification.

- a) Interim Enhanced Primary Treatment: Perform full scale piloting of alternative coagulant chemicals to see if settling performance can be improved.

<i>Current Status:</i>	<i>Completed:</i>
COMPLETED	JANUARY 9, 2018
<i>Comments:</i>	
EPA issued letter of approval to the City on January 9, 2018. Documents are available on the City's wastewater and sewer webpage: https://www.cityofportsmouth.com/publicworks/wastewater/resources	

- b) Nitrogen Removal: For a five-year period, commencing June 1, 2020 achieve specific seasonal average total nitrogen effluent concentrations and monthly average total nitrogen effluent concentrations for the Peirce Island WWTF with the upgrade.

<i>Current Status:</i>	<i>Anticipated Completion Date:</i>
TREATMENT FACILITY IN STARTUP	ONGOING
<i>Comments:</i>	
Biological Aerated Filter (BAF) is in operation and growth of microorganism that remove nitrogen is underway. Nitrification is occurring and the results will be reported for the month of June 2020.	

- c) Stormwater Project: The City will implement a green infrastructure project(s) using innovative low-impact development approaches to significantly reduce stormwater pollution from one or more existing sites. Cost of project will be \$500,000.

<i>Current Status:</i>	<i>Anticipated Completion Date:</i>
BIDS RECEIVED	DECEMBER 31, 2020
<i>Comments:</i>	
The final plans and specifications for the Multi-Purpose Athletic Fields and regional stormwater treatment system were completed in April. The project was advertised for bid on April 25, 2020 and bids were received May 19, 2020. Contract award is pending.	
Crews from the Department of Public Works continued to clear brush and trees within the project area to insure that tree removal work was completed within the timeframe dictated by the Alteration of Terrain (AOT) permit.	

- d) Sagamore Avenue Sewer Extension Project: Implement a sewer extension project to provide public sewer service to approximately 83 existing parcels adjacent to or near Sagamore Avenue with the intent to improve water quality in Sagamore Creek.

<i>Current Status:</i>	<i>Anticipated Completion Date:</i>
FINAL DESIGN	TO BE DETERMINED
<i>Comments:</i>	
Design engineering is underway. Design progress has been slowed due to need for City Council action which has been delayed. The City has requested an extension of time from EPA to commence construction due to the delay in getting final approval from the City Council on various project elements.	
City staff prepared an online survey for property owners to determine how many properties would connect to the sewer at the time of construction and to better understand existing conditions. The deadline for survey responses is May 8, 2020. This information will be helpful as the City Council considers project costs and cost apportionment.	

- e) Water Quality and Ecosystem Health Project:

<i>Current Status:</i>	<i>Anticipated Completion Date:</i>
ONGOING	N/A
<i>Comments:</i>	
The City of Portsmouth has continued to coordinate with members of Great Bay 2020 and CLF regarding funding commitments for 2020. Expenditures and the current list of commitments are documented on Attachment A1.	
ATTACHMENT A1 details financial commitments.	

ATTACHMENT A1: WATER QUALITY AND ECOSYSTEM HEALTH PROJECTS

This document summarizes payments made for the City's obligations under the Consent Decree Second Modified (No. 09-cv-283-PB), Paragraph 8.e. This item requires a contribution of \$500,000 over a period of five years to support water quality and ecosystem health efforts related to the Great Bay Estuary.

Projects	Vendor/Agent	Status	Payment Date	Payment Total
Great Bay Monitoring Collaborative	UNH	Paid	08/17/2016	5,000.00
Sagamore Creek water quality monitoring project	FB Environmental Assoc.	Executed 08/21/2017	Monthly Invoicing	47,798.00
Sagamore Creek VRAP water quality samples	CLF / VRAP / NH Public Health Labs	Paid	02/13/2018	261.00
Teachers on the Estuary (TOTE)	Great Bay Stewards	Paid	09/15/2017	7,000.00
Public outreach/education work	The Nature Conservancy (TNC)	Paid	09/15/2017	14,000.00
Oyster Shell Recycling	CCA NH	Paid	10/20/2017	4,000.00
Great Bay Estuary Monitoring Support	UNH Sponsored Programs Admin	Paid	09/15/2017	6,000.00
Oyster Larval Study: larval supply natural spat recruitment	UNH	Paid	05/24/2018	8,000.00
2018 Sagamore Creek water quality monitoring sampling (includes laboratory fees)	FB Environmental Assoc.	Executed 06/19/2018	Intermittent Invoicing	64,164.67
Data Sonde purchase for Piscataqua Region Monitoring Collaborative	UNH	Paid	06/27/2018	20,000.00
Teachers on the Estuary (TOTE)	Great Bay Stewards	Paid	07/26/2018	7,500.00
Connect The Coast	The Nature Conservancy (TNC)	Paid	08/23/2018	11,000.00
Great Bay Estuary clean-up events facilitated by Waterkeeper	Great Bay Stewards	Paid	08/30/2018	4,500.00
Soak Up the Rain initiative (DES, Waterkeeper, Great Bay Stewards)	Great Bay Stewards	Paid	08/30/2018	6,000.00
SeagrassNet	UNH PREP (Piscataqua Region Estuaries Partnership)	Paid	01/07/2019	30,000.00
2019 Sagamore Creek water quality monitoring project (includes laboratory fees)	FB Environmental Assoc.	Executed 05/07/2019	Intermittent Invoicing	64,590.00
Teachers on the Estuary (TOTE)	Great Bay Stewards	Paid	04/24/2019	7,500.00
Comprehensive Coastal Conservation Plan	The Nature Conservancy (TNC)	Paid	10/22/2019	10,000.00
Citizen Science Seaweed Monitoring	UNH PREP (Piscataqua Region Estuaries Partnership)	Paid	05/14/2019	7,500.00
Middle/High School Estuary Intensive	Great Bay Stewards	Paid	05/02/2019	4,000.00
Oyster Restoration Program	The Nature Conservancy (TNC)	Paid	04/02/2020	10,000.00
SeagrassNet 2020	UNH PREP (Piscataqua Region Estuaries Partnership)	Paid	04/02/2020	20,000.00
TOTAL				\$ 358,813.67

ATTACHMENT A2: SEWER SEPARATION PROJECTS

This document identifies and summarizes six sewer separation projects and one infiltration and inflow project (Contract #1) approved by the EPA in a letter to the City dated January 24, 2018. EPA, with NHDES concurrence, approved the updated CSO Supplemental Compliance Plan and implementation schedule as contained in the plan. The City shall:

- complete the six sewer separation projects and the Contract No. 1 wastewater collection system rehabilitation projects by no later than October 2023;
- complete the LTCP update by no later than October 2025; and
- provide project status on all seven projects as part of the monthly reports on compliance it will be submitting pursuant to Paragraph 6.a. of the Consent Decree Second Modification.

1. FLEET STREET: COURT ST TO HANOVER ST & PORTIONS OF ADJACENT STREETS

<i>Project Name:</i>	<i>Current Status: (phase of work)</i>	<i>Anticipated Construction Completion Date:</i>
FLEET ST	PRELIMINARY DESIGN	TBD
<i>Comments:</i>		
Preliminary design underway. Public project kickoff meeting tentatively scheduled for June 17, 2020. Survey underway and geotechnical borings scheduled for June 1 st and June 2 nd . A draft letter to private building owners in the separation area is under review.		

2. PLEASANT STREET: AT THE INTERSECTION WITH COURT ST

<i>Project Name:</i>	<i>Current Status: (phase of work)</i>	<i>Anticipated Construction Completion Date:</i>
PLEASANT ST	COMPLETED	NOVEMBER 2018

3. MCDONOUGH PHASE 3B: MCDONOUGH STREET FROM CORNWALL ST TO BREWSTER ST & LANGDON ST

<i>Project Name:</i>	<i>Current Status: (phase of work)</i>	<i>Anticipated Construction Completion Date:</i>
MCDONOUGH PH 3B	COMPLETED	JUNE 2019

4. ISLINGTON STREET PHASE 1: COLUMBIA ST TO ROUTE 1 BYPASS OVERPASS

<i>Project Name:</i>	<i>Current Status: (phase of work)</i>	<i>Anticipated Construction Completion Date:</i>
ISLINGTON ST PH 1	CONSTRUCTION	2020
<i>Comments:</i>		
Construction has resumed and is anticipated to be complete by the Fall of 2020. Sewer, water, and drain reconstruction between Aldrich Road and the Route 1 Bypass is underway. Roadway reconstruction is following behind utility construction.		
Portions of the work originally anticipated to be completed under this contract will be re-bid. The City will reassess completion dates for this work as part of the re-bidding process.		

5. MAPLEWOOD AVENUE: AT FAIRVIEW DR

<i>Project Name:</i>	<i>Current Status: (phase of work)</i>	<i>Anticipated Construction Completion Date:</i>
MAPLEWOOD AVE	COMPLETED	MAY 2019

6. UNION STREET: MIDDLE ST TO STATE ST & SECTIONS OF COFFINS COURT & AUSTIN ST

<i>Project Name:</i>	<i>Current Status: (phase of work)</i>	<i>Anticipated Construction Completion Date:</i>
UNION ST	ENGINEERING RFP IN DRAFT	TBD
<i>Comments:</i>		
Design Phase Engineering Services RFP is in draft and will be advertised as soon as possible. The project design scope has expanded to include sewer separation in the Willard Avenue area.		

7. SEWER REHABILITATION PROJECT

<i>Project Name:</i>	<i>Current Status: (phase of work)</i>	<i>Anticipated Construction Completion Date:</i>
CONTRACT NO. 1	DESIGN	TBD
<i>Comments:</i>		
The final design plans are being prepared and finalized by the consultant. The bidding of the project is being put on hold due to budget cutbacks related to COVID-19. The work is still programmed to be completed by October 2023.		

**Peirce Island Effluent Nitrogen
April 2020**

Date	Effluent Flow MGD	Effluent Ammonia as N mg/l	Effluent Nitrite/Nitrate- N mg/l	Effluent TKN mg/l	Total Nitrogen mg/l
4/1/2020	5.44	9.90	1.60	9.40	11.00
4/2/2020	6.09	13.00	1.90	10.00	11.90
4/3/2020	11.10				
4/4/2020	9.32				
4/5/2020	9.29				
4/6/2020	7.46				
4/7/2020	6.41				
4/8/2020	5.83	9.70	2.90	7.50	10.40
4/9/2020	7.90	9.70	3.40	7.90	11.30
4/10/2020	8.00				
4/11/2020	7.64				
4/12/2020	6.07				
4/13/2020	7.27				
4/14/2020	6.93				
4/15/2020	7.03	5.50	3.90	4.90	8.80
4/16/2020	6.06	6.00	4.20	6.50	10.70
4/17/2020	5.42				
4/18/2020	5.02				
4/19/2020	4.98				
4/20/2020	4.62				
4/21/2020	4.38				
4/22/2020	4.37	5.10	8.70	4.10	12.80
4/23/2020	4.09	4.80	10.00	3.70	13.70
4/24/2020	3.78				
4/25/2020	3.70				
4/26/2020	3.59				
4/27/2020	6.10				
4/28/2020	5.24				
4/29/2020	4.60	6.70	9.40	3.20	12.50
4/30/2020	4.50	2.60	11.00	2.10	13.10
Minimum	3.59	2.6	1.6	2.1	8.8
Maximum	11.10	13.0	11.0	10.0	13.7
Average	6.07	7.3	5.7	5.9	11.6

DMR Copy of Record

Permit																				
Permit #:	NH0100234	Permittee:	PORTSMOUTH-PIERCE CITY OF				Facility:	PORTSMOUTH CITY OF												
Major:	Yes	Permittee Address:	680 PEVERLY HILL RD PORTSMOUTH, NH 03801				Facility Location:	END OF PIERCE ISLAND ROAD PORTSMOUTH, NH 03801												
Permitted Feature:	001 External Outfall	Discharge:	001-A PIERCE ISLAND DISCHARGE																	
Report Dates & Status																				
Monitoring Period:	From 04/01/20 to 04/30/20		DMR Due Date:	05/15/20		Status:	NetDMR Validated													
Considerations for Form Completion																				
REFER TO PERMIT ISSUED ON JANUARY 18TH 1985 FOR FURTHER MONITORING REQUIREMENTS. PLEASE ATTACH AN ADDITIONAL PAGE FOR COMMENT AND EXPLANATION OF ANY VIOLATIONS, AS NECESSARY.																				
Principal Executive Officer																				
First Name:	Terry		Title:	City Engineer				Telephone:	603-766-1421											
Last Name:	Desmarais																			
No Data Indicator (NODI)																				
Form NODI:	--																			
Code	Parameter Name	Monitoring Location	Season #	Param. NODI	Qualifier 1	Value 1	Qualifier 2	Value 2	Units	Qualifier 1	Value 1	Qualifier 2	Value 2	Qualifier 3	Value 3	Units	# of Ex.	Frequency of Analysis	Sample Type	
00310	BOD, 5-day, 20 deg. C	1 - Effluent Gross	0	--	Sample	=	264.1	=	481.9	26 - lb/d	=	5.7	=	6.3	=	9.0	19 - mg/L	0	02/07 - Twice Every Week	24 - COMP24
					Permit Req.	<=	1201.0 MO AVG	<=	2002.0 DAILY MX	26 - lb/d	<=	30.0 MO AVG	<=	45.0 WKLY AVG	<=	50.0 DAILY MX	19 - mg/L		02/07 - Twice Every Week	24 - COMP24
					Value NODI															
00310	BOD, 5-day, 20 deg. C	G - Raw Sewage Influent	0	--	Sample	=	5834.2			26 - lb/d			=	130.6			19 - mg/L	0	01/30 - Monthly	24 - COMP24
					Permit Req.		Req Mon MO AVG			26 - lb/d				Req Mon MO AVG			19 - mg/L		01/30 - Monthly	24 - COMP24
					Value NODI															
00310	BOD, 5-day, 20 deg. C	W - See Comments	0	--	Sample	=	353.6			26 - lb/d								0	02/07 - Twice Every Week	24 - COMP24
					Permit Req.	<=	1801.0 WKLY AVG			26 - lb/d									02/07 - Twice Every Week	24 - COMP24
					Value NODI															
00400	pH	1 - Effluent Gross	0	--	Sample					=	6.4			=	7.1	12 - SU	0	01/01 - Daily	GR - GRAB	
					Permit Req.					>=	6.0 MINIMUM			<=	8.0 MAXIMUM	12 - SU		01/01 - Daily	GR - GRAB	
					Value NODI															
00530	Solids, total suspended	1 - Effluent Gross	0	--	Sample	=	511.7	=	1299.1	26 - lb/d	=	11.0	=	12.3	=	18.5	19 - mg/L	0	02/07 - Twice Every Week	24 - COMP24
					Permit Req.	<=	1201.0 MO AVG	<=	2002.0 DAILY MX	26 - lb/d	<=	30.0 MO AVG	<=	45.0 WKLY AVG	<=	50.0 DAILY MX	19 - mg/L		02/07 - Twice Every Week	24 - COMP24
					Value NODI															
00530	Solids, total suspended	G - Raw Sewage Influent	0	--	Sample					=	5191.4			=	8234.5	19 - mg/L	0	02/DM - Twice Every Month	24 - COMP24	
					Permit Req.						Req Mon MO AVG				Req Mon DAILY MX	19 - mg/L		02/DM - Twice Every Month	24 - COMP24	
					Value NODI															
00530	Solids, total suspended	W - See Comments	0	--	Sample	=	735.2			26 - lb/d								0	02/07 - Twice Every Week	24 - COMP24
					Permit Req.		Req Mon WKLY AVG			26 - lb/d									02/07 - Twice Every Week	24 - COMP24
					Value NODI															
30500	Coliform, fecal - % samples exceeding limit	1 - Effluent Gross	0	--	Sample									=	0.03	23 - %	1	01/30 - Monthly	CA - CALCTD	
					Permit Req.									<=	10.0 DAILY MX	23 - %		01/30 - Monthly	CA - CALCTD	
					Value NODI															
50050	Flow, in conduit or thru treatment plant	1 - Effluent Gross	0	--	Sample	=	5.71	=	11.01	03 - MGD								0	99/99 - Continuous	RC - Recorder (auto)
					Permit Req.		Req Mon MO AVG		Req Mon DAILY MX	03 - MGD									99/99 - Continuous	RC - Recorder (auto)
					Value NODI															
50060	Chlorine, total residual	1 - Effluent Gross	0	--	Sample					=	0.0			=	0.0	19 - mg/L	0	99/99 - Continuous	RC - Recorder (auto)	
					Permit Req.						<=	0.33 MO AVG			<=	0.57 DAILY MX		19 - mg/L	99/99 - Continuous	RC - Recorder (auto)
					Value NODI															

X 61211	Enterococci	1 - Effluent Gross	0	--	Sample					=	1.3			=	2.0	30 - MPN/100mL	0	02/07 - Twice Every Week	GR - GRAB
					Permit Req.						Req Mon MO GEO				Req Mon DAILY MX	13 - #/100mL		02/07 - Twice Every Week	GR - GRAB
					Value NODI														
74055	Coliform, fecal general	1 - Effluent Gross	0	--	Sample					=	1.4					30 - MPN/100mL	0	01/01 - Daily	GR - GRAB
					Permit Req.					<=	14.0 MO GEO					30 - MPN/100mL		01/01 - Daily	GR - GRAB
					Value NODI														
81010	BOD, 5-day, percent removal	K - Percent Removal	0	--	Sample					=	95.7					23 - %	0	01/30 - Monthly	CA - CALCTD
					Permit Req.					>=	85.0 MINIMUM					23 - %		01/30 - Monthly	CA - CALCTD
					Value NODI														
81011	Solids, suspended percent removal	K - Percent Removal	0	--	Sample					=	89.8					23 - %	0	01/30 - Monthly	CA - CALCTD
					Permit Req.					>=	85.0 MINIMUM					23 - %		01/30 - Monthly	CA - CALCTD
					Value NODI														

Submission Note

If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

Edit Check Errors

Parameter		Monitoring Location	Field	Type	Description	Acknowledge
Code	Name					
61211	Enterococci	1 - Effluent Gross	Units	Soft	You have selected units that are different from the units established by your permit. Please contact your Regulatory Authority to discuss the selection of any units not identified in your permit. (Error Code: 3)	Yes

Comments

The City has communicated with EPA regarding the need to reconcile the mass based limits in the 2007 permit with the approved treatment facility design flow. See attached cover letter for details. The City will continue to report based on the lower limits in the April 10, 2007 NPDES Final Permit as shown in the Discharge Monitoring Report but reaffirms that that reconciliation should be made to correct the discrepancy.

Attachments

Name	Type	Size
2020_4_CSO_NH0100234_1A.PDF	pdf	213715.0
2020_4_MOR_NH0100234_1A.pdf	pdf	978935.0
2020_4_NITROGEN_NH0100234_1A.pdf	pdf	43733.0
2020_4_CoverLetter_NH01002341A.pdf	pdf	157791.0

Report Last Saved By

PORTSMOUTH-PIERCE CITY OF

User: tldesmarais@cityofportsmouth.com
Name: Terry Desmarais
E-Mail: tldesmarais@cityofportsmouth.com
Date/Time: 2020-05-15 17:13 (Time Zone: -04:00)

Report Last Signed By

User: tldesmarais@cityofportsmouth.com
Name: Terry Desmarais
E-Mail: tldesmarais@cityofportsmouth.com
Date/Time: 2020-05-15 17:13 (Time Zone: -04:00)



PUBLIC WORKS DEPARTMENT

CITY OF PORTSMOUTH

680 Peverly Hill Road
Portsmouth N.H. 03801
(603) 427-1530 FAX (603) 427-1539

May 15, 2020

VIA NetDMR

U.S. Environmental Protection Agency
Water Technical Unit (OES04-SMR)
5 Post Office Square - Suite 100
Boston, MA 02109-3912

RE: NPDES Permit No. NH0100234 / Discharge No. 001A

Through the month of March 2020, the City of Portsmouth reported on compliance with the Consent Decree Interim Permit Limits. The EPA reset the Discharge Monitoring Form for the month of April 2020 based on the April 10, 2007 NPDES Final Permit. Beginning April 2020 (this reporting month) the City of Portsmouth Peirce Island WWTF begins reporting on compliance with the secondary treatment limits. The City has communicated with EPA regarding the need to reconcile the mass based limits in the 2007 permit with the approved treatment facility design flow. The 2007 permit mass limits for BOD and TSS were calculated based on a design flow of 4.8 MGD and are 1,201 lbs/d, 1,801 lbs/d, and 2,002 lbs/d for the average month, average week and maximum daily, respectively. The approved constructed treatment facility design flow is 6.13 MGD which would result in average month, average week and maximum daily BOD and TSS mass limits of 1,534 lbs/d, 2,301 lbs/d, and 2,556 lbs/d, respectively. The City will continue to report based on the lower limits in the April 10, 2007 NPDES Final Permit as shown in the Discharge Monitoring Report but reaffirms that that reconciliation should be made to correct the discrepancy.

In the month of April, the Peirce Island Wastewater Treatment Facility had no violations. The flow pacing of chemicals has resulted in an effluent with average removal of 95.7% BOD and 89.8% removal of total suspended solids (TSS). On April 5th there was a secondary bypass due to startup related troubleshooting of 0.01 MGD. On April 9th there was a secondary bypass due to high flow during a wet weather event of 0.36 MGD. On April 5th there was a fecal coliform concentration of 2419.6 MPN/100 mL. The nitrogen species sample results from Absolute Resource Associates, a contract lab, are included. The chlorine (Cl₂) detection limit is 0.05 mg/L and the plant reports less than the detection limit using Standard Methods 4500-CL-G Page 4-63 (colorimetric). Please call if you have any questions or need additional information.

Sincerely,

Terry Desmarais, P.E., City Engineer

cc: Stephanie Larson, NHDES

Peter Conroy, Chief Plant Operator, Peirce Island WWTF