



# PUBLIC WORKS DEPARTMENT

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CITY OF PORTSMOUTH

680 Peverly Hill Road

Portsmouth N.H. 03801

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

***VIA EMAIL***

August 31, 2024

Benjamin Bahk, Director  
Water Enforcement Division  
Office of Enforcement and Compliance Assurance  
U.S. EPA (2243A)  
1200 Pennsylvania Ave, NW  
Washington, D.C. 20460

Re: Consent Decree 09-cv-283-PB  
Monthly Report on Compliance for July 2024  
City of Portsmouth, New Hampshire

Dear Mr. Bahk,

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 City has completed all Consent Decree construction milestones relative to the upgrade of the Peirce Island Wastewater Treatment Facility ("PI WWTF"). A summary of those milestones and completion dates are set forth in the *Summary of Completed Work* section. Remaining commitments relative to the PI WWTF are the ongoing obligation to meet the existing NPDES permit and the nitrogen removal obligations set forth Section IV, Paragraph 8 of the Consent Decree. That reporting is set forth in the *Nitrogen Removal Reporting Summary* attached.

Outstanding are the City's obligations under its Supplemental Compliance Plan, referenced at paragraph 12.c of the Consent Decree. By letter dated April 18, 2024, EPA approved an updated schedule and project list. The status of that ongoing work is found in the *Supplemental Compliance Plan Project Status* section.

**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 if you have any questions or require additional information.

Sincerely,



Peter Rice  
Director of Public Works  
(603) 766-1416

cc: Solanch S. Pastrana-Del Valle, U.S. EPA New England – Region 1  
Tracy L. Wood, NHDES Wastewater Engineering Bureau Administrator  
Allen Brooks, Esq., Department of Justice, Environmental Protection Bureau Chief  
Jaegun Lee, Enforcement Counsel, U.S. EPA New England – Region 1  
David Gordon, Esq., U.S. Department of Justice  
Tom Irwin, Esq., Conservation Law Foundation  
Karen Conard, City Manager, City of Portsmouth  
Suzanne Woodland, Deputy City Manager and Regulatory Counsel  
Brian Goetz, Deputy Director of Public Works  
Erich Fiedler, City Engineer

## ***SUMMARY OF COMPLETED WORK***

09-cv-283-PB SECTION	PI WWTF CONSTRUCTION MILESTONE	DATE COMPLETED
III.5.a.	Execute Contract to Construct Upgrades	August 25, 2016
III.5.b.	Submit Two Additional Milestones for EPA Review and Approval	November 29, 2016
III.5.b.	Additional Milestone 1: Transfer of the existing <u>SCADA system</u> to the new Headworks Building	October 18, 2017
III.5.b.	Additional Milestone 2: Startup and testing of the Secondary Influent Pump Station in the new Solids Building	May 7, 2019
III.5.c.	BAF Substantial Completion	December 31, 2019
III.5.d.	Achieve Compliance with NPDES Permit Limits	April 1, 2020

09-cv-283-PB SECTION	COMPLETED MITIGATION & SEWER SEPARATION PROJECTS	DATE COMPLETED
IV.8.a. Mitigation	<u>Interim Enhanced Primary Treatment</u>	January 9, 2018
IV.8.c. Mitigation	<u>Stormwater Project</u>	November 9, 2020
IV.8.e. Mitigation	<u>Water Quality and Ecosystem Health Projects</u>	April 2021
III.6.a. Sewer Separation Projects	<u>Pleasant Street at the intersection with Court Street</u>	November 2018
	<u>McDonough Phase 3B: McDonough Street from Cornwall Street to Brewster Street and Langdon Street</u>	June 2019
	<u>Maplewood Avenue at Fairview Drive</u>	May 2019
	<u>Islington Street Phase 1: Columbia Street to Route 1 Bypass Overpass</u>	October 2021
	<u>Sagamore Ave Extension Project</u>	August 2023
	<u>Union Street Project</u>	October 2023

**NOTE:**

Detailed information on completed milestones, mitigation projects and commitments can be found in previous reports.

Reports are published on the City's website: [www.cityofportsmouth.com/publicworks/wastewater/resources](http://www.cityofportsmouth.com/publicworks/wastewater/resources)

## *NITROGEN REMOVAL REPORTING SUMMARY*

For a five-year period, commencing June 1, 2020, achieve a seasonal average total nitrogen (TN) effluent concentration from May 1<sup>st</sup> through October 31<sup>st</sup> of no greater than 8 mg/L and a monthly average total nitrogen effluent concentration no greater than 8 mg/L from June 1<sup>st</sup> through October 31<sup>st</sup> for the Peirce Island Wastewater Treatment Facility with the upgrade.

The average concentration of effluent total nitrogen in the month of August 2024 was 6.4 mg/L TN. The report submitted with the City's Discharge Monitoring Report (DMR) for NPDES Permit NH0100234 is attached.

	<i>Average TN Concentration (mg/L)</i>	<i>Seasonal Average TN Concentration (mg/L) May – October*</i>
May 2020	9.5	5.4
June 2020	6.6	
July 2020	4.9	
August 2020	6.1	
September 2020	4.0	
October 2020	3.2	
November 2020	2.6	
December 2020	3.0	
January 2021	3.0	
February 2021	4.2	
March 2021	4.0	
April 2021	3.0	
May 2021	5.2	4.0
June 2021	3.8	
July 2021	3.4	
August 2021	3.7	
September 2021	3.3	
October 2021	5.1	
November 2021	3.8	4.9
December 2021	4.6	
January 2022	6.5	
February 2022	5.6	
March 2022	4.0	
April 2022	5.2	
May 2022	5.0	4.6
June 2022	4.6	
July 2022	5.7	
August 2022	4.7	
September 2022	4.3	
October 2022	4.4	
November 2022	3.3	3.9
December 2022	3.4	
January 2023	3.8	
February 2023	4.3	
March 2023	4.6	
April 2023	3.7	
May 2023	3.8	3.9
June 2023	3.6	
July 2023	3.9	
August 2023	3.7	
September 2023	3.8	
October 2023	4.6	
November 2023	4.1	

December 2023	4.6	
January 2024	5.5	
February 2024	5.4	
March 2024	5.8	
April 2024	7.8	
May 2024	5.2	
June 2024	5.1	
July 2024	6.4	

*\*Seasonal average concentration was calculated using the individual TN data points for the time period of the season.*

## **SUPPLEMENTAL COMPLIANCE PLAN PROJCT STATUS**

This document identifies the sewer separation projects and infiltration and inflow projects approved by the EPA in a letter to the City dated April 14, 2024. Reporting is required pursuant to Paragraph 6.a. of the Consent Decree Second Modification.

<b>ISLINGTON STREET PHASE 2</b>	Required completion date:
	November 30, 2024
Current Status (phase of work)	Anticipated Construction Completion Date:
CONSTRUCTION	November 2024
<i>Comments:</i>	
The project is in the Construction phase and work is on-going.	

<b>INFLOW AND INFLITRATION REDUCTION CONTRACT 1</b>	Required completion date:
	October 31, 2025
Current Status (phase of work)	Anticipated Construction Completion Date:
FINAL DESIGN	2025
<i>Comments:</i>	
The City and consultant are preparing the project for advertisement, with construction anticipated to start Q4 2024.	

<b>WILLARD AVENUE SEWER SEPARATION</b>	Required completion date:
	December 31, 2025
Current Status (phase of work)	Anticipated Construction Completion Date:
CONSTRUCTION	Summer 2025
<i>Comments:</i>	
The project is in the Construction phase and work is on-going.	

<b>FLEET STREET PHASE 1</b>	Required completion date:
	December 31, 2026
Current Status (phase of work)	Anticipated Construction Completion Date:
PRELIMINARY DESIGN	December 31, 2026
<i>Comments:</i>	
Design and permitting are in progress. The City continues to attempt to negotiate easements and access with adjacent property owners. The City is in the process of submitting NHDES wetland permit application for outfall work and marsh restoration.	

<b>INFLOW AND INFILTRATION REDUCTION CONTRACT 2</b>	Required completion date:
	October 31, 2028
Current Status (phase of work)	Anticipated Construction Completion Date:
PRELIMINARY DESIGN	TBD
<i>Comments:</i>	
Contract 2 Sewer Rehabilitation is at approximately 30% design. The design is based on an SSES study completed by Woodard & Curran and updated by Underwood Engineers in 2020.	

<b>FLEET STREET PHASE 2</b>	Required completion date:
	December 31, 2028
Current Status (phase of work)	Anticipated Construction Completion Date:
PRELIMINARY DESIGN	TBD
<i>Comments:</i>	
The design of Fleet Street Phase 2 is at approximately 50%. The City is moving forward with Fleet Street Phase 2 design activities.	

<b>LONG TERM CONTROL PLAN UPDATE</b>	Required completion date:
	October 31, 2030
Current Status (phase of work)	Anticipated Completion Date:
Not started	October 31, 2030
<i>Comments:</i>	
The Long-Term Control Plan (LTCP) Update was extended to 2030. The City intends to begin updates to the LTCP as projects listed in the consent decree are completed and monitored for effectiveness. Prior to LTCP deadlines, the City has applied for State Revolving Funds to perform updates to the Wastewater System Model.	

**Peirce Island Effluent Nitrogen  
July 2024**

Date	Effluent Flow MGD	Effluent Ammonia as N mg/l	Effluent Nitrite/Nitrate-N mg/l	Effluent TKN mg/l	Total Nitrogen mg/l
7/1/2024	2.87				
7/2/2024	2.76	0.03	2.20	2.00	4.20
7/3/2024	2.86	0.03	3.80	1.80	5.60
7/4/2024	2.73				
7/5/2024	2.79				
7/6/2024	3.01				
7/7/2024	2.93				
7/8/2024	2.73				
7/9/2024	3.49	0.04	2.46	2.70	5.16
7/10/2024	2.76				
7/11/2024	2.77	0.04	2.20	2.80	5.00
7/12/2024	2.76				
7/13/2024	3.27				
7/14/2024	3.07				
7/15/2024	2.93				
7/16/2024	3.18	0.04	4.55	3.20	7.75
7/17/2024	3.31				
7/18/2024	2.88	0.47	5.24	4.90	10.14
7/19/2024	2.69				
7/20/2024	2.70				
7/21/2024	2.80				
7/22/2024	2.70				
7/23/2024	2.67	0.09	3.01	4.00	7.01
7/24/2024	2.88				
7/25/2024	3.00	0.04	3.20	3.70	6.90
7/26/2024	2.99				
7/27/2024	2.52				
7/28/2024	2.66				
7/29/2024	2.61				
7/30/2024	2.75	0.17	2.42	3.40	5.82
7/31/2024	2.52				
Minimum	2.52	0.0	2.2	1.8	4.2
Maximum	3.49	0.5	5.2	4.9	10.1
Average	2.87	0.1	3.2	3.2	6.4