



# PUBLIC WORKS DEPARTMENT

CITY OF PORTSMOUTH

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June 29, 2017

Mark Pollins  
Director of Water Enforcement  
U.S. Environmental Protection Agency  
Room #3142  
USEPA Ariel Rios Building (AR)  
1200 Pennsylvania Avenue N.W.  
Washington, D.C. 20004

Re: Consent Decree 09-cv-283-PB  
Monthly Report on Compliance for May 2017  
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 and Second 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 May 2017 is as follows:

- Installation of reinforced concrete walls for the new Gravity Thickener No. 2
- Installation of concrete masonry unit (CMU) walls at the new Headworks Building
- Installation of precast concrete roof planks at the new Headworks Building
- Installation of utilities near the new Sanitary Pump Station No. 2 and interior mechanical components

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

Ongoing work by the Contractor through the month of June 2017 includes the following:

- Drilling and blasting for ledge removal for the Biological Aerated Filter (BAF) Building
- Placing formwork, reinforcing steel, and concrete for the BAF structure base slab
- Painting of interior piping and valves and installation of controls at the new Sanitary Pump Station No. 2
- Installation of temporary connection of Sanitary Pump Station No. 2 discharge to the aerated grit chambers
- Installation of brick facade at the Headworks Building
- Installation of roofing on the Headworks Building
- Installation of interior mechanical, electrical and plumbing work at the Headworks Building
- Continue to export excavated materials off site
- Installation of concrete perimeter walkway and conduct hydrostatic test of Gravity Thickener No. 2
- Excavation/ledge removal for drainage, storm water quality structure & drainage bypass structure
- Four Tree Island erosion control and parking lot demolition and reconstruction
- Grass overflow area parking erosion control and drainage installation
- Excavation and preparation for installation of the Mechanic Street force main temporary piping

Projected work to be completed by the Contractor in the month of June 2017 includes the following:

- Excavation and installation of the Mechanic Street force main temporary piping
- Four Tree Island parking lot demolition and reconstruction
- Grass overflow area parking drainage installation
- Installation of brick facade at the Headworks Building
- Installation of concrete perimeter walkway and conduct hydrostatic test of Gravity Thickener No. 2

**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
<b>Contract Value</b>	<b>\$ 73,699,557.88</b>

Payment Application No.	Work Conducted Through	Amount	Cumulative Amount	Percent Complete
1	09/30/2016	\$1,393,500.00	\$ 1,393,500.00	1.89%
2	10/31/2016	\$2,855,100.00	\$ 4,248,600.00	5.76%
3	11/30/2016	\$1,717,330.09	\$ 5,965,930.09	8.09%
4	12/31/2016	\$1,374,011.19	\$ 7,339,941.28	9.96%*
5	01/31/2017	\$1,434,502.03	\$ 8,864,437.63	12.03%
6	02/28/2017	\$1,136,436.97	\$10,191,515.67	13.83%
7	03/31/2017	\$2,697,828.60	\$12,958,668.29	17.58%
8	04/30/2017	\$2,431,878.69	\$15,407,877.99	20.91%
9	05/31/2017	\$1,876,920.03	\$17,284,798.02	23.45%**

\*Percentage Complete changed from 10.08% (from December 2016 Report) to 10.03% due to Change Order #1 in January 2017.

\*\*Percentage Complete for all months changed due to Change Order #2 in May 2017. Percent Complete Column updated based on new Contract Value \$73,699,557.88.

**iv. 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 1368 calendar days.

The project is 23.0% complete based on the BAF treatment system completion as of May 31, 2017 and 20.0% complete based on project substantial completion.

**v. Status of all required permit applications**

Application for the Installation of an Aboveground Storage Tank was submitted to NHDES on April 14, 2017. The tank is associated with a new standby generator at 200 Peirce Island Road, Portsmouth, NH. The application is still under review by NHDES as of May 31, 2017.

General State Permit (#GSP-EG-0120) was issued for the following device as described in the permit application submitted by City of Portsmouth on May 16, 2017 and received by NHDES on the same day:

Device	Make/ Model/ Serial No.	Year Installed	Fuel(s)	Max. Heat Input Rate (MMBtu/hr)	Max. Fuel Use Rate	Output Rating
EMERGENCY GENERATOR #2	CUMMINS DQGAB QSK50-G4 NR2 25415692	2017	ULTRA LOW SULFUR DIESEL (ULSD)	14.22	103.8 gal / hr	2200 HP

The permit expires on April 30, 2020.

**vi. 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 below.

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

\*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 bargaining alternatives prior to contract execution. The Contractor's schedule for completion was reduced to accommodate the modified contract execution delay.

**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 average concentration of effluent total nitrogen in the month of May 2017 was 21.0 mg/L TN. See attached report, which was submitted with the City's May 2017 Discharge Monitoring Report (DMR) for NPDES Permit NH0100234.

These Monthly Construction Reports are being posted on the City's wastewater website at <http://www.portsmouthwastewater.com/resources.html>.



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.

Very truly yours,



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

Enclosure

cc: Chief, Environmental Enforcement Section

ec: Joy Hilton, USEPA Region 1  
Tracy L. Wood, P.E., NHDES Wastewater Engineering Bureau  
Allen Brooks, Esq., Department of Justice, Chief Environmental Protection Bureau  
Tonia Bandrowicz, Senior Enforcement Counsel, U.S. EPA  
David Gordon, Esq., U.S. Department of Justice  
Tom Irwin, Esq. Conservation Law Foundation  
John P. Bohenko, City Manager, City of Portsmouth  
Suzanne Woodland, Deputy City Attorney  
Nancy Colbert-Puff, Deputy City Manager  
Brian Goetz, Deputy Director of Public Works  
Terry Desmarais, City Engineer  
Donald Song, Wastewater Project Manager

# Peirce Island Effluent Nitrogen

May 2017

Date	1003 Inf Flow	99959 Effluent Ammonia as N	99960 Effluent Nitrite/Nitrate-N	99961 Effluent TKN	99962 Total Nitrogen
	MGD	mg/l	mg/l	mg/l	mg/l
5/1/2017	5.218				
5/2/2017	6.495	6	8.4	12	20
5/3/2017	5.348	11	1.2	18	19
5/4/2017	4.900				
5/5/2017	7.247				
5/6/2017	7.528				
5/7/2017	6.500				
5/8/2017	5.919				
5/9/2017	5.403	13	<1.0	19	20
5/10/2017	4.980	14	<1.0	20	21
5/11/2017	4.702				
5/12/2017	4.553				
5/13/2017	4.298				
5/14/2017	8.182				
5/15/2017	6.998				
5/16/2017	6.060	13	1.3	20	21
5/17/2017	5.426	10	<1.0	17	18
5/18/2017	5.041				
5/19/2017	4.692				
5/20/2017	4.341				
5/21/2017	4.069				
5/22/2017	4.424				
5/23/2017	4.387	15	1.1	22	23
5/24/2017	4.109	21	<1.0	25	26
5/25/2017	4.969				
5/26/2017	11.187				
5/27/2017	7.217				
5/28/2017	6.145				
5/29/2017	5.488				
5/30/2017	5.147				
5/31/2017	4.914				
Minimum	4.069	6	<1.0	12	18
Maximum	11.187	21	8.4	25	26
Average	5.674	13	<2.0	19	21