The State of New Hampshire
DEPARTMENT OF ENVIRONMENTAL SERVICES

Thomas S. Burack, Commissioner

May 3, 2016

Paula Anania
Chief Plant Operator
Portsmouth WWTF
680 Peverly Hill Road
Portsmouth, NH 03801

Subject: National Pollutant Discharge Elimination System (NPDES)
Compliance Sampling Inspection (CSI)
Portsmouth Wastewater Treatment Facility (WWTF), Portsmouth, NH
NPDES Permit # NH0100234

Dear Ms. Anania:

On April 21, 2016, as a representative of the New Hampshire Department of Environmental Services (DES), Water Division, Wastewater Engineering Bureau, I conducted a NPDES CSI at the Portsmouth WWTF. Objectives of the CSI include determining compliance with NPDES permit conditions, verifying the accuracy of permit-required information and verifying the adequacy of permittee sampling and monitoring.

The following people were present during this CSI:

Paula Anania, Chief Plant Operator, Portsmouth WWTF
Tim Babkirk, Assistant Chief Plant Operator, Portsmouth WWTF
Stephanie Larson, Environmental Inspector, DES

Enclosed is a copy of EPA's Water Compliance Inspection Report Form 3560-3, Attachment A – Sample Data Summary, and the inspection sample results. The laboratory results for each of the parameters tested were within the allowable permit limitations. Only the enterococcus sample was taken in accordance with Portsmouth's permit requirements, thus the result must be included in the April 2016 Discharge Monitoring Report (DMR) calculations.

DEFICIENCY: (Response required).

During the inspection the following deficiency was noted:

1. Portsmouth was notified of a leak under the Peirce Island Road bridge on January 27, 2016. Because there are both water and wastewater lines under the bridge, they were not able to determine the source and nature of the leak until sometime in February. Portsmouth personnel did not notify DES of the wastewater discharge until March 4, 2016. This exceeded both the 24-hour verbal and 5-day written notification requirements in Part II.D.1.e. of the permit. Portsmouth personnel should ensure that all permit notifications and reporting requirements are done on time.

CORRECTIVE ACTIONS REQUIRED:

Describe all steps taken to correct the deficiency identified by the inspector. This description should also include the date the deficiency was corrected or the anticipated correction date. If the submitted response is acceptable to DES and has not resulted in environmental harm, DES will close out the inspection and no further action, other than continued compliance, is required by the permittee. If DES identifies repeat deficiencies or deficiencies that result in environmental harm in this or future inspections, DES may proceed immediately with enforcement.

DES requests that Portsmouth submit its response to this inspection by **June 3, 2016**. If DES does not receive a signed, complete response within the allowed time frame, DES may proceed with an appropriate enforcement action.

Please mail your inspection response to:

Stephanie Larson
NHDES/WD-WWEB
P.O. Box 95
Concord, NH 03302-0095

If you have any questions, please call me at (603) 271-1493.

Sincerely,

Stephanie Larson

Stephanie Larson
Environmental Inspector
Compliance Section
Wastewater Engineering Bureau

cc: DES, WD, WWEB/File

ec: Tracy L. Wood, P.E., Administrator, WWEB
Joy Hilton, USEPA Water Technical Unit

Attachments: EPA Form 3560-3 – Water Compliance Inspection Report
Attachment A – Sample Data Summary
April 21, 2016 Sample Results

United States Environmental Protection Agency
Washington, D.C. 20460

Water Compliance Inspection Report

Section A: National Data System Coding (i.e., PCS)

Transaction Code	NPDES	yr/mo/day	Inspection Type	Inspector	Fac Type
1 N 2 5	3 NH0100234 11	12 160421 17	18 S	19 S	20 1

Remarks: 21 ____ 66

Inspection Work Days	Facility Self-Monitoring Evaluation Rating	B1	QA	Reserved	
67 15 69	70 5	71 N	72 N	73 74	75 80

Section B: Facility Data

Name and Location of Facility Inspected (For industrial users discharging to POTW, also include POTW name and NPDES permit number)
Portsmouth WWTF
Peirce Island
Portsmouth, NH 03801

POTW Name/Permit No.

Entry Time/Date	Permit Effective Date
9:38 AM 4/21/2016	8/1/2007
Exit Time/Date	**Permit Expiration Date**
12:25 PM 4/21/2016	8/1/2012

Name(s) of On-Site Representative(s)/Title(s)/Phone and Fax Number(s)
Paula Anania, Chief Plant Operator
Tim Babkirk, Assist. Chief Plant Operator
Phone: (603)427-1553
Fax:

Other Facility Data (e.g., SIC NAICS, and other descriptive information)

Name, Address of Responsible Official/Title/Phone and Fax Number
Brian Goetz, Dep. Dir of Public Works
680 Peverly Hill Road
Portsmouth, NH 03801
Phone: (603)427-1530
Fax:
Contacted ☐ Yes ☑ No

Section C: Areas Evaluated During Inspection (Check only those areas evaluated)

☐ Permit	☑ Self Monitoring Program	☐ Pretreatment	☐ MS4
☑ Records/Reports	☐ Compliance Schedules	☐ Pollution Prevention	
☑ Facility Site Review	☑ Laboratory	☐ Storm Water	
☑ Effluent/Receiving Waters	☐ Operations/Maintenance	☐ Combined Sewer Overflow	
☑ Flow Measurement	☐ Sludge Handling/Disposal	☑ Sanitary Sewer Overflow	

Section D: Summary of Findings/Comments

(Attach additional sheets of narrative and checklists, including Single Event Violation codes, as necessary)

SEV Codes *SEV Description*

Signature of Inspector	Agency/Office/Phone and Fax Numbers	
Stephanee Larson	NHDES/WD/WWEB (603) 271-3908/4128	5/2/16
Signature of Management QA Reviewer	**Agency/Office/Phone and Fax Numbers**	
Tracy L. Wood, P.E. Tracy L. Wood	NHDES/WD/WWEB (603) 271-3908/4128	5/3/2016

INSTRUCTIONS

Section A: National Data System Coding *(i.e., PCS)*

Column 1: Transaction Code: Use N, C, or D for New, Change, or Delete. All inspections will be *new* unless there is an error in the data entered.

Columns 3-11: NPDES Permit No. Enter the facility's NPDES permit number - third character in permit number indicates permit type for U=unpermitted, G=general permit, etc.. *(Use the Remarks columns to record the State permit number, if necessary.)*

Columns 12-17: Inspection Date. Insert the date entry was made into the facility. Use the year/month/day format (e.g., 04/10/01 = October 01, 2004).

Column 18: Inspection Type*. Use one of the codes listed below to describe the type of inspection:

A	Performance Audit	U	IU Inspection with Pretreatment Audit	!	Pretreatment Compliance (Oversight)
B	Compliance Biomonitoring	X	Toxics Inspection	@	Follow-up (enforcement)
C	Compliance Evaluation (non-sampling)	Z	Sludge - Biosolids	[	Storm Water-Construction-Sampling
D	Diagnostic	#	Combined Sewer Overflow-Sampling	]	Storm Water-Construction-Non-Sampling
F	Pretreatment (Follow-up)	$	Combined Sewer Overflow-Non-Sampling	:	Storm Water-Non-Construction-Sampling
G	Pretreatment (Audit)	+	Sanitary Sewer Overflow-Sampling	;	Storm Water-Non-Construction-Non-Sampling
I	Industrial User (IU) Inspection	&	Sanitary Sewer Overflow-Non-Sampling	<	Storm Water-MS4-Sampling
J	Complaints	*	CAFO-Sampling	=	Storm Water-MS4-Non-Sampling
M	Multimedia	^	CAFO-Non-Sampling	>	Storm Water-MS4-Audit
N	Spill	2	IU Sampling Inspection		
O	Compliance Evaluation (Oversight)	3	IU Non-Sampling Inspection		
P	Pretreatment Compliance Inspection	4	IU Toxics Inspection		
R	Reconnaissance	5	IU Sampling Inspection with Pretreatment		
S	Compliance Sampling	6	IU Non-Sampling Inspection with Pretreatment		
		7	IU Toxics with Pretreatment		

Column 19: Inspector Code. Use one of the codes listed below to describe the *lead agency* in the inspection.

A —	State (Contractor)
B —	EPA (Contractor)
E —	Corps of Engineers
J —	Joint EPA/State Inspectors—EPA Lead
L —	Local Health Department (State)
N —	NEIC Inspectors
O —	Other Inspectors, Federal/EPA (Specify in Remarks columns)
P —	Other Inspectors, State (Specify in Remarks columns)
R —	EPA Regional Inspector
S —	State Inspector
Y —	Joint State/EPA Inspectors—State lead

Column 20: Facility Type. Use one of the codes below to describe the facility.

1 — Municipal. Publicly Owned Treatment Works (POTWs) with 1987 Standard Industrial Code (SIC) 4952.
2 — Industrial. Other than municipal, agricultural, and Federal facilities.
3 — Agricultural. Facilities classified with 1987 SIC 0111 to 0971.
4 — Federal. Facilities identified as Federal by the EPA Regional Office.
5 — Oil & Gas. Facilities classified with 1987 SIC 1311 to 1389.

Columns 21-66: Remarks. These columns are reserved for remarks at the discretion of the Region.

Columns 67-69: Inspection Work Days. Estimate the total work effort (to the nearest 0.1 work day), up to 99.9 days, that were used to complete the inspection and submit a QA reviewed report of findings. This estimate includes the accumulative effort of all participating inspectors; any effort for laboratory analyses, testing, and remote sensing; and the billed payroll time for travel and pre and post inspection preparation. This estimate does not require detailed documentation.

Column 70: Facility Evaluation Rating. Use information gathered during the inspection (regardless of inspection type) to evaluate the quality of the facility self-monitoring program. Grade the program using a scale of 1 to 5 with a score of 5 being used for very reliable self-monitoring programs, 3 being satisfactory, and 1 being used for very unreliable programs.

Column 71: Biomonitoring Information. Enter D for static testing. Enter F for flow through testing. Enter N for no biomonitoring.

Column 72: Quality Assurance Data Inspection. Enter Q if the inspection was conducted as followup on quality assurance sample results. Enter N otherwise.

Columns 73-80: These columns are reserved for regionally defined information.

Section B: Facility Data

This section is self-explanatory except for "Other Facility Data," which may include new information not in the permit or PCS (e.g., new outfalls, names of receiving waters, new ownership, other updates to the record, SIC/NAICS Codes, Latitude/Longitude).

Section C: Areas Evaluated During Inspection

Check only those areas evaluated by marking the appropriate box. Use Section D and additional sheets as necessary. Support the findings, as necessary, in a brief narrative report. Use the headings given on the report form (e.g., Permit, Records/Reports) when discussing the areas evaluated during the inspection. The heading marked "Multimedia" may indicate medias such as CAA, RCRA, and TSCA.

Section D: Summary of Findings/Comments

Briefly summarize the inspection findings. This summary should abstract the pertinent inspection findings, not replace the narrative report. Reference a list of attachments, such as completed checklists taken from the NPDES Compliance Inspection Manuals and pretreatment guidance documents, including effluent data when sampling has been done. Use extra sheets as necessary.

*Footnote: In addition to the inspection types listed above under column 18, a state may continue to use the following wet weather and CAFO inspection types until the state is brought into ICIS-NPDES: K: CAFO, V: SSO, Y: CSO, W: Storm Water 9: MS4. States may also use the new wet weather, CAFO and MS4 inspections types shown in column 18 of this form. The EPA regions are required to use the new wet weather, CAFO, and MS4 inspection types for inspections with an inspection date (DTIN) on or after July 1, 2005.

Attachment A
Sample Data Summary – To be completed with every inspection

Facility Name: Peirce Island WWTF Sample Date: 4/21/16 Inspector: Stephanie Larson

Sample Type: Grab Sample Time: 12:24 pm Sampler: Tim Babkirk

Sample Location: final discharge after dechlorination

Is this the normal sample location for the plant effluent sampling? YES

Were split samples collected? YES (NO) Comments: _____

Sampling Acknowledgement: (Operator/other signature): _____ Date/Time: 4-21-16 12:27

Laboratory Analyses – attach NH Public Health Lab report to this attachment

Analysis	Analytical Method	Permit Limit	Results	Comments
BOD_5	Standard Methods 5210 B	No limit-report result only	82 mg/L	
TSS	Standard Methods 2540 D	No limit-report result only	< 10 mg/L	
fecal coliform	Standard Methods 9222D	No limit-report result only	< 3 cts/100 mL	
enterococci	IDEXX Enterolert	No limit-report result only	14.6 MPN/100 mL	

NH DIVISION OF
Public Health Services

Monday, May 02, 2016

STERGIOS SPANOS
NHDES WASTEWATER ENGINEERING BUREAU
29 HAZEN DR
CONCORD NH 03301

RE: Workorder: B602055 - NPDES,MUNICIPAL
Project ID: 05-0021520 - NPDES MUNICIPAL

Dear STERGIOS SPANOS:

Enclosed are the analytical results for the sample(s) received by the laboratory on Thursday, Apr 21, 2016. Unless indicated as exceptions, the sample(s) met EPA requirements for hold times, preservation techniques, container types and other receipt conditions. Please contact us if you need measurement uncertainty values associated with radiological parameters. Results reported conform to the most current NELAC standard, where applicable, unless otherwise narrated in the body of the report. Any results reported for samples subcontracted to another laboratory are indicated on the report. Please refer to http://www2.des.nh.gov/CertifiedLabs/Certified-Method.aspx for a copy of our current NELAP certificate and accredited parameters.

We appreciate the opportunity to provide this analytical service for you. If you have any questions regarding this report or your results, please feel free to contact us.

The following signature indicates technical review and acceptance of the data.

Sincerely,

Lucio S. Barinelli, Ph.D.

Authorized Signature

Enclosures

NH DIVISION OF
Public Health Services

New Hampshire Public Health Laboratories
Department of Health and Human Services
29 Hazen Dr., Concord NH 03301
Phone: (603) 271-3445
Fax: (603) 271-2997

DATA QUALIFIER DESCRIPTIONS

Workorder: B602055 - NPDES,MUNICIPAL

Project ID: 05-0021520 - NPDES MUNICIPAL

The following are a list of some column headers and abbreviations with their meanings as used throughout the analysis report. Referring to them will assist you in interpreting your report.

RDL= The lowest value the laboratory calibrates its instrumentation for this parameter. Any instrumental estimate of results below the Report Limit is reported as Not Detected (ND).

DF= For some heavily contaminated samples, the laboratory must dilute samples to keep the final number within its calibration scale. This is referred to as the Dilution Factor. Final results and reporting limits are adjusted relative to the DF used.

QUAL= Indicates that the result has been qualified. Refer to the Analytical Report Comments and Qualifiers page for details.

LIMIT= Reflects the Maximum Contamination Level (MCL), if one exists, a secondary or recommended level or another State or Federal action level.

Surrogates = For some analyses, the laboratory adds a number of compounds to monitor analytical performance. These results are provided for your information.

> = Greater than	< = Less than
mg/L = milligrams per Liter	ug/L = micrograms per Liter
mg/kg = milligrams per kilogram	ug/kg = micrograms per kilogram
P-A = Present/Absent	CTS/100 mL = Counts per 100 milliliters
CFU = Colony forming unit	MPN = Most Probable Number
pCi/L = picoCuries per Liter	

J = Estimated value; analyte detected at less than the Reporting Limit but greater than the laboratory's Method Detection Limit.

B = Analyte detected in the method blank for the batch of samples. Its presence in the sample may be suspect.

E = Estimated value; result exceeded the upper calibration level for the parameter.

Radiological results are expressed as a number + an uncertainty factor. Uncertainty is a calculated measure of the precision around the reported value.

All results for pH and residual chlorine samples analyzed more than 15 minutes after time of collection shall be considered QUALIFIED.

For assistance in interpreting your lab results and obtaining information regarding water treatment; go to www.des.nh.gov and search "Be Well Informed." Or go to http://xml2.des.state.nh.us/DWITool/.

NH DIVISION OF
Public Health Services

New Hampshire Public Health Laboratories
Department of Health and Human Services
29 Hazen Dr., Concord NH 03301
Phone: (603) 271-3445
Fax: (603) 271-2997

SAMPLE SUMMARY

Workorder: B602055 - NPDES,MUNICIPAL

Project ID: 05-0021520 - NPDES MUNICIPAL

Lab ID	Sample ID	Ref ID	Matrix	Date Collected	Date Received	Misc Info
B602055001	AFTER DECHLOR	WWTF PORTSMOUTH	WATER	4/21/2016 12:24	4/21/2016	

NH DIVISION OF
Public Health Services

New Hampshire Public Health Laboratories
Department of Health and Human Services
29 Hazen Dr., Concord NH 03301
Phone: (603) 271-3445
Fax: (603) 271-2997

ANALYTICAL REPORT COMMENTS AND QUALIFIERS

Workorder: B602055 - NPDES,MUNICIPAL

Project ID: 05-0021520 - NPDES MUNICIPAL

Sample Comments

Chlorine Residual (mg/L): 0

Parameter Footnotes

[1] Result is the average of the x50 x30 x25 and x12 dilutions. MS and MSD recoveries are 101and 126% on the x50 dilution.

[2] Method Blank = 1 mg/L

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29 Hazen Dr., Concord NH 03301
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ANALYTICAL RESULTS

Workorder: B602055 - NPDES,MUNICIPAL
Project ID: 05-0021520 - NPDES MUNICIPAL

Lab ID: **B602055001** Matrix: WATER
Sample ID: **AFTER DECHLOR** Sample Type: SAMPLE
Description: WWTF PORTSMOUTH Collector : STEPHANIE LARSON

Parameters	Results	Units	RDL	DF	Prepared	Analyzed	Limit	Qual
Microbiology								
Preparation Method: SM 9222D Analytical Method: SM 9222D								
Fecal Coliform, CTS	<3	CTS/100mL		1	4/21/2016 15:06	4/22/2016 16:17		
Preparation Method: ASTM D6503-99 Analytical Method: ASTM D6503-99								
Enterococci	14.6	MPN/100mL		1	4/21/2016 14:55	4/22/2016 16:10		
Wet Chemistry								
Analytical Method: SM 5210B								
Biochemical Oxygen Demand, 5	82	mg/L		1		4/22/2016 10:10		1
Analytical Method: SM 2540D								
Total Suspended Solids	ND	mg/L	10	1		4/28/2016 11:30		2

REPORT OF LABORATORY ANALYSIS

nelac

NH PUBLIC HEALTH LABORATORIES-WATER LAB LOGIN AND CUSTODY SHEET

(Laboratory Policy: Samples not meeting method requirements will be analyzed at the discretion of the DPHS, PHL.)
Samples must be delivered in a cooler with ice or ice packs.

LAB ACCOUNT (Billing) 05-0021520 **One Stop Project:** _____ **NHDES Site Number** _____

Description : Portsmouth WWTF **Town:** Portsmouth **Temp. °C.** 2°C T-OK

Collected by: _____ **Contact & Phone #** Stephanie Larson

Sample Location/Station ID	Date Time Sampled	# of Containers	Matrix	BOD TSS		Fecal coliform CTS 42223		enterococci D6503		Sampler Comments	Lab Login #
after dechlor	4/21/16 12:24	3	AQ	✓		✓		✓		Chlorine = 0	
			AQ							B602055001 04/20/16 12:24 AFTER DECHLOR 21 05-0021520	
			AQ								

Relinquished By Stephanie Larson Date and Time 4/21/16 14:15 PM Received By _____

Relinquished By _____ Date and Time _____ **Received For Laboratory By** _____

Matrix: A= Air S= Soil AQ= Aqueous (Ground Water, Surface Water, Drinking Water, Waste Water) x Other: _____

Section No.: 22.0
Revision No.: 7
Date 07-2011
Page 1 of 1

Page _____ **of** _____ Data Reviewed By _____ Date 5/2/16