

# PUBLIC WORKS DEPARTMENT

CITY OF PORTSMOUTH

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July 30, 2013

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  
Quarterly Report No. 15  
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 February 15, 2013, the City of Portsmouth is submitting this quarterly status report.

The modified Consent Decree requires the filing of quarterly reports as follows:

Within 30 days after the end of each calendar quarter (i.e., by April 30, July 30, October 30, and January 30) after the Effective Date of this Consent Decree, until termination of this Decree pursuant to Section XVI, the City shall submit a written report for the preceding calendar quarter that shall include a description of the following: i) the status of any construction or compliance measures, including whether any such construction or compliance measure could be completed prior to relevant milestones contained herein consistent with sound engineering practice and normal construction practices; ii) the status of all Consent Decree milestones, including whether any have been achieved prior to the date for doing so; iii) any problems encountered or anticipated, together with the proposed or implemented solutions; iv) the status of permit applications; v) operation and maintenance operations; and vi) reports to State agencies.

The following is the list of compliance requirements listed in Section IV of the Consent Decree including additional requirements listed in the Consent Decree Modification. For clarity the requirements are listed in plain text and the status of the item is shown in ***Bold Italics***.

## Preface

As noted in Quarterly Report 14 (April 30, 2013), the City planned to submit additional information with this quarterly report to justify a revised Consent Decree schedule for completion of the new plant with both secondary and nitrogen treatment capability. The

additional information would support the City's position that it is in best engineering practice and public benefit to incorporate nitrogen removal into the required treatment facility upgrade with a reasonable extension of consent decree deadlines. The EPA expressed its dissatisfaction with this approach in a letter to the City dated May 30, 2013 and the City, through its outside Council (Nelson, Kinder & Mosseau, PC), notified the EPA of a dispute regarding its position on an extension request by letter dated June 27, 2013. Additional data will be provided under separate cover regarding this dispute. No additional backup is thus provided in this quarterly report.

### **Specific Consent Decree Items**

8. Nine Minimum Controls Compliance Plan. Attached (*in the referenced CD*) as Appendix A is the Nine Minimum Controls Compliance Plan. The City shall implement the Nine Minimum Controls Compliance Plan in accordance with the schedule specified in Appendix A.

- i) There are no construction related activities with this item. The compliance measures associated with this item are on-going.*
- ii) There is no Consent Decree milestone associated with this item.*
- iii) There have been no problems encountered or anticipated with this item.*
- iv) There are no permit applications associated with this item.*
- v) Operation and maintenance is on-going*
- vi) There are no reports to State Agencies associated with this item.*

9. Wastewater Master Plan. Attached as Appendix B is the WMP SOW dated May 17, 2007. The City shall implement the WMP in Appendix B, and comply with all milestones and schedules in Appendix B.1.

*The Schedule listed in Appendix B.1 has been modified by the Consent Decree Modification to include additional tasks and a revised schedule. The Consent Decree Modification includes a schedule for completion of secondary treatment upgrades at the Peirce Island Treatment Plant as well as adjustments to the Long Term Control Plan project schedule. Final completion for the wastewater treatment plant upgrades, including compliance with permit requirements, is scheduled for May 2017. The additional requirements of the amended Consent Decree are listed below as items g through n:*

g. By June 30, 2012, the City shall complete pilot testing of potential treatment technologies for achieving secondary treatment, including, but not necessarily limited to: Biologically Aerated Filters (BAF), BioMag, Moving Bed Biofilm Reactors (MBBR) w/ Dissolved Air Flotation (DAF), and Conventional Activated Sludge with BioMag. By July 30, 2012, the City shall complete a data summary relative to the pilot testing.

*This milestone has been met. No further action required.*

h. By October 1, 2012, the City shall submit a Piloting Technical Memorandum that includes data from piloting and a recommendation on the design and capacity of secondary treatment facilities.

*This milestone has been met. The final engineering report was submitted September 28, 2012 to State Agencies concurrent with submission to the EPA as part of the milestone deadlines. The results of this work were presented to representatives of EPA and NHDES on December 18, 2012. Formal comments were received from the EPA by letter dated January 30, 2013. Additional comments were exchanged between the City and EPA by letters dated March 1, 2013 (City to EPA), March 6, 2013 (EPA to City) and March 15, 2013 (City to EPA). The City met with representatives of EPA and NHDES on April 1, 2013 to discuss correspondence. The City is proceeding to design and construct a 6.13 MGD secondary treatment plant. No further action is required of the City.*

i. By July 1, 2013, the City shall commence final design of secondary treatment facilities.

*This milestone has been met. The City received Statement of Qualifications for Design Engineering Services on January 17, 2013 and executed a design phase engineering contract with the selected consultant, AECOM, on June 14, 2013 after successful contract negotiations. A kickoff meeting for the work was held on June 18, 2013. The City Council voted to move forward with the BAF technology, which may stay within the fence line on April 8, 2013. No further action is required of the City.*

j. By August 31, 2014, the City shall complete design of secondary treatment facilities.

- i) The City held a kickoff meeting for Design Engineering Services with AECOM on June 18, 2013. The consultant's scope of work includes design of a Biological Aerated Filter (BAF) capable of meeting a total nitrogen effluent limit of 8 mg/L on a seasonal rolling average basis. Design of the treatment facilities is underway and field work has been started including survey and geotechnical and archaeological investigations. There are no construction activities with this item.*
- ii) The City's consultant is designing a WWTF upgrade capable of nitrogen removal. As noted in previous quarterly reports and separate correspondence, designing for nutrient removal will require substantial additional effort above that for the plant required under the Consent Decree which achieves only secondary treatment and so this Consent Decree milestone is unlikely to be met. The City has requested an extension of this milestone. Efforts will be made to expedite the schedule if possible and consistent with sound engineering practice.*
- iii) See response to ii above. The City is continuing to explore with AECOM whether there are components of the design effort that can be moved forward or expedited so as to lessen impacts to the schedule.*
- iv) The Peirce Island WWTF NPDES permit reapplication was submitted in December, 2011. A draft NPDES permit has not yet been received. Design related permitting is underway. This work includes a Phase IA Archaeological Sensitivity Assessment related to a review*

*of the National Register of Historic Places as required per Section 106 of the National Historic Preservation Act. If the proposed impacts extend outside the existing fence line, the City will need to seek reconciliation of Land and Water Conservation Funds and Coastal Zone Management Funds used in development of recreational facilities on the island. Additional natural resource type permits will be required and will be defined as the final layout is developed and finalized.*

- v) There are no operation and maintenance activities with this item.*
- vi) There is no report associated will this milestone to be submitted to State Agencies.*

k. By March 1, 2015, the City shall commence construction of secondary treatment facilities.

- i) There are no construction activities with this item yet. The City has requested an extension of this milestone and the construction schedule will be finalized as part of Consent Decree procedures referenced in requirement j above.*
- ii) The City's consultant is designing a WWTF upgrade capable of nitrogen removal. As noted in previous quarterly reports and separate correspondence, designing for nutrient removal will require substantial additional effort beyond that for constructing a secondary only plant required by the Consent Decree and so this Consent Decree milestone is unlikely to be met.*
- iii) See response to ii above. The City is continuing to explore with AECOM whether there are components of the design and construction effort that can be moved forward or expedited so as to lessen impacts to the schedule. Efforts will be made to expedite the schedule if possible and consistent with sound engineering and construction practices.*
- iv) The Peirce Island WWTF NPDES permit reapplication was submitted in December, 2011. A draft permit has not yet been received. Additional natural resource type permits will be required for construction and will be defined as the design is finalized.*
- v) There are no operation and maintenance activities with this item.*
- vi) There is no report associated will this milestone to be submitted to State Agencies.*

l. By March 1, 2017, the City shall complete construction of secondary treatment facilities.

- i) There are no construction activities with this item yet. . The City has requested an extension of this milestone and the construction schedule will be finalized as part of Consent Decree procedures referenced in requirement j above.*
- ii) This milestone is unlikely to be met. The completion of construction will be impacted by resolution of the issues raised in the previous Quarterly Reports and separate correspondence.in accordance with the procedures set forth in the Consent Decree*
- iii) See response to ii above. The City is continuing to explore with AECOM whether there are components of the design and construction effort that can be moved forward or expedited so as to lessen impacts to the schedule.*
- iv) The Peirce Island WWTF NPDES permit reapplication was submitted in December, 2011. A draft permit has not yet been received. Additional natural resource type permits will be required for construction and will be defined as the design is finalized.*
- v) There are no operation and maintenance activities with this item.*
- vi) There is no report associated will this milestone to be submitted to State Agencies.*

m. By May 1, 2017, the City shall achieve compliance with secondary treatment limits in the Permit.

- i) *There are no construction activities with this item yet. Construction schedule will be finalized as part of Consent Decree requirement j above.*
- ii) *This milestone is unlikely to be met. The date for achieving secondary compliance will be impacted by resolution of the issues raised in previous Quarterly Reports and separate correspondence.*
- iii) *See response to i) and ii) above. The City is continuing to explore with AECOM whether there are components of the design and construction effort that can be moved forward or expedited so as to lessen impacts to the schedule.*
- iv) *The Peirce Island WWTF NPDES permit reapplication was submitted in December, 2011. A draft permit has not been received. Additional natural resource type permits will be required for construction and will be defined as the design is finalized.*
- v) *There are no operation and maintenance activities with this item.*
- vi) *There is no report associated with this milestone to be submitted to State Agencies.*

n. Whenever feasible, the City shall commence work in advance of milestones and complete such work as expeditiously as practicable consistent with sound engineering practice and normal construction practices.

*The City understands this measure and when consistent with sound engineering practice and normal construction practices will strive to meet its intent.*

10. Combined Sewer Overflow Facility Upgrades. The City shall implement its April 2005 Final CSO Long Term Control Plan in accordance with the following schedule and shall complete all construction for implementation of the 2005 LTCP by October, 2012:

*A revised schedule was included with the Consent Decree Modification which was filed on July 2, 2012.*

Planning Area I.D.	Contract I.D.	Project Start Date	Project Completion Date
Lincoln 3	Phase I	In Progress	10/1/2011
Lincoln 3	Phase II	In Progress	10/1/2012
Lincoln 3	Phase III	In Progress	10/1/2013
Court/State	Court #3	1/1/2008	1/1/2012
Islington	Islington #1	Under Design	10/1/2010
Islington	Islington #2	Under Design	1/1/2012

**Revised LTCP Schedule \***

<i>Planning Area I.D.</i>	<i>Contract I.D.</i>	<i>Project Status</i>	<i>Project Completion Date</i>
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<i>Lincoln 3</i>	<i>Phase I</i>	<i>Substantially Complete</i>	<i>6/1/2012</i>
<i>Lincoln 3</i>	<i>Phase II</i>	<i>Notice of Award</i>	<i>10/1/2014</i>
<i>Lincoln 3</i>	<i>Phase III</i>	<i>Under Construction</i>	<i>10/1/2013</i>
<i>Islington</i>	<i>Islington #2</i>	<i>Substantially Complete</i>	<i>7/30/13 <del>6/1/2013</del></i>

\* As filed July 2, 2012 Consent Decree Modification.

- i) The construction related activities with this item are shown in the table above. The compliance measures associated with this item are on-going. The Islington #2 project sewer separation is complete. This work was completed in advance of the revised project completion deadline. See attached correspondence from the City to EPA dated June 27, 2013. Bids were received for the Lincoln 3 Phase III project on June 21, 2013. Bids have been reviewed and a recommendation to award has been made. A notice of intent to award will be issued in the near future. Construction of the remaining projects will be completed earlier if possible and consistent with sound engineering practice and normal construction practices.*
  - ii) Consent Decree milestones associated with this item will meet the revised schedule and earlier if possible and consistent with sound engineering practice and normal construction practices.*
  - iii) There are no problems encountered or anticipated with this item.*
  - iv) Wetland and Shore-land permit applications for Lincoln Area Contract 3 Phase III are completed and approved.*
  - v) There are no operation and maintenance activities with this item.*
  - vi) There are no reports to State Agencies associated with this item.*
- 11. Interim Emissions/Effluent Limits.** Until the City completes construction of and achieves full operation of secondary treatment facilities in accordance with the schedule contained in this Consent Decree, the City shall comply with the interim limits and measures set forth in Appendix C. (See Current AO effluent limits). Thereafter, the City shall comply with the applicable NPDES permit limits then in effect.
- i) The Peirce Island WWTF has met the interim permit limits for the Quarter covered by this report. The compliance measures associated with this item are on-going. There are no construction related activities with this item.*
  - ii) There are no Consent Decree milestones associated with this item.*
  - iii) The wastewater BOD5 strength coming to Peirce Island appears to increase in the soluble form during periods of low flow and high temperature. This occurred last summer and early fall of 2012 (see Quarterly Report 12 and 13). The soluble component passes through the physical CEPT process and makes it difficult to meet permit limits. The City and its consultant reviewed additional BOD5 sampling data and attached a summary of the analysis to Quarterly Report 13. There have been no permit exceedances since the 2012 time period. The City anticipates that this issue will be resolved by construction of the new facility.*
  - iv) There is no permit application pending associated with this item.*
  - v) There have been no exceptional operation and maintenance activities outside of routine wastewater treatment facility operation associated with this item.*
  - vi) There are no reports to State Agencies associated with this item that have not also been submitted to the EPA as part of the milestone deadlines.*

12. Post Construction Monitoring Plan.

*This item was submitted as part of the June 4, 2010 Wastewater Master Plan Draft submission. The implementation schedule will be adjusted to reflect the new schedule listed in item 10 above.*

- i) There are no construction related activities or compliance measures associated with this item.*
- ii) The Consent Decree milestones associated with this item will be met subject to the concerns raised above under paragraph 9, item iii.*
- iii) The Consent Decree milestones associated with this item will be met subject to the concerns raised above under paragraph 9, item iii.*
- iv) There is no permit application pending associated with this item.*
- v) There are no operation and maintenance activities associated with this item.*
- vi) There are no reports to State Agencies associated with this item.*

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 call me at 603-766-1416 if you have any questions or require additional information.

Very truly yours,



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

Encl.

cc: Chief, Environmental Enforcement Section w/encl.  
Joy Hilton, USEPA Region 1 w/encl.  
Tracy L. Wood, P.E., NHDES Wastewater Engineering Bureau w/encl.  
Allen Brooks, Esq., Department of Justice, Environmental Protection Bureau w/encl.  
Mr. John P. Bohenko, City Manager, City of Portsmouth w/o encl.  
Robert P. Sullivan, City Attorney w/encl.  
Suzanne Woodland, Assistant City Attorney w/encl.  
David S. Allen, P.E., Assistant City Manager w/o encl.  
E. Tupper Kinder, Esquire Nelson Kinder & Mosseau PC, w/encl.





## CITY OF PORTSMOUTH

LEGAL DEPARTMENT

Robert P. Sullivan, City Attorney – 603-610-7204 (Direct Dial)  
Kathleen M. Dwyer, Assistant City Attorney – 603-427-1338 (Phone/Fax)  
Suzanne M. Woodland, Assistant City Attorney – 603-610-7240 (Direct Dial)

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June 27, 2013

**VIA E-MAIL**

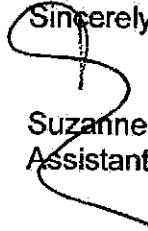
Michael Wagner, Esq.  
US Environmental Protection Agency  
Region 1  
5 Post Office Square - Suite 100  
Boston, MA 02109-3912

**RE: Portsmouth, NH - CD Docket No. 09-CV-238-PB**

Dear Mike,

Enclosed please find confirmation from Underwood Engineers that the sewer separation work for Long Term Control Plan project identified as Islington #2 (Cass Street Sewer Separation Project) in the Consent Decree has been completed. This will be further reported in the City's next quarterly report.

Sincerely,

  
Suzanne M. Woodland  
Assistant City Attorney

cc: Brian Goetz, Deputy Director of Public Works  
Terry Desmarais, City Engineer, Water and Sewer Division  
E. Tupper Kinder, Esq.



1565.00

June 24, 2013

Rick S. Dolce, P.E.  
Engineering Projects Manager  
Public Works Department  
680 Peverly Hill Road  
Portsmouth, New Hampshire 03801

*Re: Consent Decree - Sewer Separation  
Cass Street Area Sewer Improvements  
Portsmouth, New Hampshire*

Dear Mr. Dolce:

As of June 24, 2013 the main line pipe work and related service connections have been constructed to provide separate sewer and storm drain systems. The completion date for separation based on EPA approved timelines is July 31, 2013. Based on the timelines provided, the Contractor has completed the separation work 37 days ahead of the EPA deadline.

Please contact this office if there are any questions.

Very truly yours,

UNDERWOOD ENGINEERS

A handwritten signature in black ink, appearing to read 'BTD'.

Benjamin T., Dreyer, P.E.  
Senior Project Engineer

BTD/btd

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