

April 30, 2012

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. 101
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, 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; ii) the status of all Consent Decree milestones; 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.~~

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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.

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The following is the list of compliance requirements listed in Section IV of the Consent Decree [including additional requirement listed in the Consent Decree Modification which was filed July 2, 2012](#). For clarity the requirements are listed in plain text and the status of the item is shown in ***Bold Italics***.

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*
- iv) *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 ~~superseded~~ modified by the July 2, 2012 Consent Decree Modification to include additional tasks and a revised schedule submitted as part of the Wastewater Master Plan Final Submission submitted to EPA on November 15, 2010 schedule. ~~An implementation schedule was included in section 1.2.5 of that submission. The initial effort included piloting potential technologies with a final report on the piloting effort due to the EPA and DES by September 2012. The City anticipates meeting that compliance deadline.~~

~~he~~ ~~The Portsmouth City Council voted on April 16th to authorize the City Manager to enter into a Consent Decree Modification which 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. Attached is the proposed Consent Decree Modification approved by the Council. The additional requirements are: The City understands that there may need to be modifications to the form of the Consent Decree Modification, thus final approval and execution is pending.~~

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. Piloting to test potential treatment technologies for achieving secondary treatment has been completed.

- i) *~~There are minor pilot related~~ No further construction activities with this item (see AECOM monthly reports attached). The compliance measures associated with this item are on-going.*
- ii) *The ~~original~~ Consent Decree milestones associated with this item have been met with the exception of the final submission of the Wastewater Master Plan, which based mutual agreement between the City and the EPA was submitted on November 15, 2010. The final revised schedule will be formally incorporated into a revised Consent Decree.*
- iii) *~~The~~ No problems encountered meeting the Consent Decree milestones other than those that have been previously communicated relative to piloting challenges, have been previously identified by the City. Those problems relate to critical regulatory input in the*

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~~areas of anti-degradation and future permit limits. In addition, we have had a number of start-up related pilot issues (see attached AECOM monthly reports) that have delayed the pilot study. We anticipate the submission of the final pilot report (September 30, 2012) will not be impacted by the delays discussed above.~~

- iv) ~~The Peirce Island WWTF NPDES~~ No permits are pending reapplication was submitted in December, 2011.
- v) Operation and maintenance activities with this item are ~~were~~ being done by AECOM and Blueleaf as part of the pilot study contract.
- iv) ~~There~~ Pilot Study Data Report has been submitted under separate cover. There are ~~are~~ no additional reports to State Agencies associated with this item that have not also been submitted to the EPA as part of the milestone deadlines. Included for information are pilot study monthly status reports prepared by AECOM which outlines the various issues encountered during operation of the pilot study.

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.

- i) No further construction activities with this item.*
- ii) The Consent Decree milestones associated with this item will be met on schedule we do not anticipate completion of this measure before October 1, 2012, see July 25, 2012, correspondence to EPA's Michael Wagner- attached hereto.*
- iii) We do not anticipate any problems meeting this Consent Decree milestones.*
- iv) No permits are pending.*
- v) There are no operation and maintenance activities with this item.*
- iv) The final engineering report will be submitted to State Agencies concurrent with submission to the EPA as part of the milestone deadlines.*

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

- i) No construction activities with this item.*
- ii) We anticipate that this Consent Decree milestone will be met on schedule and earlier if possible and consistent with sound engineering practice and normal construction practices.*
- iii) We do not anticipate any problems meeting this Consent Decree milestones.*
- iv) The Peirce Island WWTF NPDES permit reapplication was submitted in December, 2011. Final issuance of this permit with effluent limits is necessary to complete this milestone.*
- v) There are no operation and maintenance activities with this item.*
- iv) There is no report associated will this milestone to be submitted to State Agencies.*

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

- i) No construction activities with this item.*
- ii) We anticipate that this Consent Decree milestone will be met on schedule and earlier if possible and consistent with sound engineering practice and normal construction practices.*
- iii) We do not anticipate any problems meeting this Consent Decree milestones.*
- iv) The Peirce Island WWTF NPDES permit reapplication was submitted in December, 2011. Final issuance of this permit with effluent limits is necessary to complete this milestone.*
- v) There are no operation and maintenance activities with this item.*
- iv) 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) No construction activities with this item yet. Construction schedule will be finalized as part*

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of Consent Decree requirement j above.

ii) We anticipate that this Consent Decree milestone will be met on schedule and earlier if possible and consistent with sound engineering practice and normal construction practices.

iii) We do not anticipate any problems meeting this Consent Decree milestones.

iv) The Peirce Island WWTF NPDES permit reapplication was submitted in December, 2011.

Final issuance of this permit with effluent limits is necessary to complete this milestone.

v) There are no operation and maintenance activities with this item.

iv) 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) No construction activities with this item yet. Construction schedule will be finalized as part of Consent Decree requirement j above.

ii) We anticipate that this Consent Decree milestone will be met on schedule and earlier if possible and consistent with sound engineering practice and normal construction practices.

iii) We do not anticipate any problems meeting this Consent Decree milestones.

iv) The Peirce Island WWTF NPDES permit reapplication was submitted in December, 2011.

Final issuance of this permit with effluent limits is necessary to complete this milestone.

v) There are no operation and maintenance activities with this item.

iv) 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) No construction activities with this item yet. Construction schedule will be finalized as part of Consent Decree requirement j above.

ii) We anticipate that this Consent Decree milestone will be met on schedule and earlier if possible and consistent with sound engineering practice and normal construction practices.

iii) We do not anticipate any problems meeting this Consent Decree milestones.

iv) The Peirce Island WWTF NPDES permit reapplication was submitted in December, 2011.

Final issuance of this permit with effluent limits is necessary to complete this milestone.

v) There are no operation and maintenance activities with this item.

iv) There is no report associated will 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:

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A revised schedule revision was requested as part of the November 15, 2010 Final Wastewater Master Plan Submission. Additional time was requested for Lincoln Phase I, II, and III as well as Islington #2 (Cass Street). The schedule adjustment to Islington #2 (Cass St) project was to allow the piloting effort at Peiree Island to move forward sooner. The money allocated for Islington #2 (Cass St) was reallocated to the Peiree Island piloting effort included with the Consent Decree Modification which was filed on July 2, 2012.

In summary, the schedule and project scope adjustments have been necessary to address the difficulties encountered as part of construction in a tight urban environment. Narrow streets, limited staging areas as well as deep sewer in ledge impact the construction schedule. In addition, public concerns related to traffic, dust control, pedestrian traffic, school buses, etc., requires flexibility in construction sequencing.

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 Start Date</i> <i>Status</i>	<i>Project Completion Date</i>
<i>Lincoln 3</i>	<i>Phase I</i>	<i>Under Construction</i> <i>Substantially Complete</i>	<i>6/1/2012</i>
<i>Lincoln 3</i>	<i>Phase II</i>	<i>In Design</i>	<i>10/1/2014</i>
<i>Lincoln 3</i>	<i>Phase III</i>	<i>Bid, Construction Pending</i> <i>Under Construction</i>	<i>10/1/2013</i>
<i>Islington</i>	<i>Islington #2</i>	<i>Out to Bid</i> <i>Under Construction</i>	<i>6/1/2013</i>

* As filed As July 2, 2012 outlined in the proposed Consent Decree Modification approved by the City of Portsmouth on April 16, 2012.

- i) *The construction related activities with this item are shown on the table above. The compliance measures associated with this item are on-going. Construction on a part of Contract 3 Phase III is in conjunction with work at the adjacent Portsmouth Middle School is underway. ~~The balance of Phase III has been bid and contractor selected. Construction on Phase III is anticipated to start June 4, 2012. Islington #2 has been advertised for bid with a bid opening on May 10 is under construction, 2010. Construction will be completed earlier if possible and consistent with sound engineering practice and normal construction practices. Construction of Islington #2 is anticipated to start in late June early July 2012.~~*
- ii) *The Consent Decree milestones associated with this item ~~have~~ will met the adjusted 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.*
- iv) *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.

~~With the exception of BOD₅ effluent concentration and pounds-percent removal for the month of April the City has met the Interim Emission/Effluent Limits for the Quarter covered by this report. As a result of this issue~~ Wastewater Treatment Facility Staff ~~has~~^{ye} investigated the BOD₅ issues ~~and has worked with Wes Ripple of the NHDES to investigate the potential causes and have concluded that the soluble fraction of the influent wastewater has increased. Despite 70–80% TSS removal of the higher soluble BOD₅ fraction, the character of the influent is making it harder for the chemically enhanced primary treatment to achieve the necessary permit limits.~~ Wastewater Staff ~~has~~^{is} conducting additional tests to further define and remedy this issue ~~and has adjusted chemical dosages to improve BOD₅ removal.~~

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

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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.
~~City Engineer~~ Deputy Director of Public Works, ~~Water and Sewer Divisions~~

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., Deputy Director of Public Works w/encl.