# UNITED STATES DISTRICT COURT DISTRICT OF NEW HAMPSHIRE

INITED STATES OF AMEDICA	)
UNITED STATES OF AMERICA,	)
Plaintiff,	)
STATE OF NEW HAMPSHIRE,	)
Plaintiff-Intervenor,	)
V.	)
CITY OF PORTSMOUTH, NEW HAMPSHIRE,	)
Defendant.	) )
	)

CIVIL ACTION NO.

CONSENT DECREE

<b>TABLE OF</b>	CONTENTS
-----------------	----------

I. JURISDICTION AND VENUE 1 -	
II. <u>APPLICABILITY</u> 2-	
III. <u>DEFINITIONS</u> 3 -	
IV. <u>COMPLIANCE REQUIREMENTS</u>	
V. <u>REPORTING REQUIREMENTS</u> 10 -	
VI. <u>STIPULATED PENALTIES</u> 12 -	
VII. <u>FORCE MAJEURE</u> 16 -	
VIII. <u>DISPUTE RESOLUTION</u> 18 -	
IX. INFORMATION COLLECTION AND RETENTION 21 -	
XI. <u>COSTS</u> 25 -	
XII. <u>NOTICES</u> 25 -	
XIII. <u>EFFECTIVE DATE</u> 26 -	
XIV. RETENTION OF JURISDICTION 27 -	
XV. MODIFICATION 27 -	
XVI. <u>TERMINATION</u> 28 -	
XVII. <u>PUBLIC PARTICIPATION</u> 28 -	
XVIII. <u>SIGNATORIES/SERVICE</u> 29 -	
XIX. INTEGRATION 29 -	
XX. <u>APPENDICES</u> 30 -	
XXI. <u>FINAL JUDGMENT</u> 30 -	

Appendix A: Nine Minimum Controls Compliance Plan	i
Appendix B: Wastewater Master Plan Scope of Work i	i
Appendix B.1: Milestones and Schedules ii	ii
Appendix C: Interim Emissions/Effluent Limits iv	7

Plaintiff, the United States of America, on behalf of the United States Environmental Protection Agency ("EPA"), has filed a Complaint in this action, concurrently with this Consent Decree, alleging that Defendant, the City of Portsmouth, New Hampshire ("the City") violated Section 301(a) of the Clean Water Act ("CWA"), 33 U.S.C. §1301(a).

Plaintiff-Intervenor, the State of New Hampshire ("State"), has filed a Complaint-in-Intervention alleging that the City violated the New Hampshire Water Pollution and Waste Disposal Act, NH RSA 485-A ("New Hampshire Act");

The Complaint and Complaint-in-Intervention allege that the City is violating its National Pollutant Discharge Elimination System ("NPDES") permit effluent limitations for discharges from the City's Peirce Island wastewater treatment plant and permit conditions applicable to discharges from overflow points in the City's combined wastewater collection system; and

The Parties recognize, and the Court by entering this Consent Decree finds, that this Consent Decree has been negotiated by the Parties in good faith and will avoid litigation among the Parties, and that this Consent Decree is fair, reasonable, and in the public interest.

NOW, THEREFORE, with the consent of the Parties, IT IS HEREBY ADJUDGED, ORDERED, AND DECREED as follows:

## I. JURISDICTION AND VENUE

1. This Court has jurisdiction over the subject matter of this action pursuant to 28 U.S.C. §§ 1331, 1345, and 1355, Section 309(b) of the CWA, 33 U.S.C. § 1319(b), and Section 12 of the New Hampshire Act, NH RSA 485-A:12, and over the Parties. Venue lies in this District pursuant to Section 309(b) of the CWA, 33 U.S.C. § 1319(b), and 28 U.S.C. §§ 1391(b) and (c) and 1395(a), because the City is located in this judicial district. For purposes of this Decree, or any action to enforce this Decree, the City consents to the Court's jurisdiction over this Decree and any such action and over the City and consents to venue in this judicial district. 2. For purposes of this Consent Decree, the City agrees that the Complaint states claims upon which relief may be granted pursuant to Section 309(b) of the CWA, 33 U.S.C. § 1319(b), and 28 U.S.C. §§ 1331, 1345, and 1355. The Court has jurisdiction over the claims in the State's Complaint-in-Intervention under the doctrine of pendent jurisdiction.

### II. <u>APPLICABILITY</u>

3. The obligations of this Consent Decree apply to and are binding upon the United States and the State, and upon the City and any successors, assigns, or other entities or persons otherwise bound by law.

4. No transfer of ownership or operation of the Facility, whether in compliance with the procedures of this Paragraph or otherwise, shall relieve the City of its obligation to ensure that the terms of the Consent Decree are implemented. At least 30 Days prior to such transfer, the City shall provide a copy of this Consent Decree to the proposed transferee and shall simultaneously provide written notice of the prospective transfer, together with a copy of the proposed transfer agreement, to EPA Region I, the United States Attorney for the District of New Hampshire, and the United States Department of Justice, in accordance with Section XII. Any attempt to transfer ownership or operation of the Facility without complying with this Paragraph constitutes a violation of this Consent Decree.

5. The City shall provide a copy of this Consent Decree to all officers, employees, and agents whose duties might reasonably include compliance with any provision of this Decree, as well as to any contractor retained to perform work required under this Consent Decree. The City shall condition any such contract upon performance of the work in conformity with the terms of this Consent Decree.

- 2 -

6. In any action to enforce this Consent Decree, the City shall not raise as a defense the failure by any of its officers, directors, employees, agents, or contractors to take any actions necessary to comply with the provisions of this Consent Decree.

#### III. <u>DEFINITIONS</u>

7. Terms used in this Consent Decree that are defined in the CWA or in regulations promulgated pursuant to the CWA shall have the meanings assigned to them in the CWA or such regulations, unless otherwise provided in this Consent Decree. Whenever the terms set forth below are used in this Consent Decree, the following definitions shall apply:

a. "Complaint" shall mean the complaint filed by the United States in this action, "Complaint-in-Intervention" shall mean the complaint-in-intervention filed by the State in this action, and "Complaints" shall mean the Complaint and the Complaint-in-Intervention.

b. "Combined Sewer Overflow Discharge" or "CSO Discharge" shall mean any wet weather discharge from any outfall identified as a "Combined Sewer Overflow" in NPDES Permit No. NH0100234.

c. "Combined Sewer Overflow Facility" shall mean overflow control devices and portions of the collection system downstream of such devices.

d. "Consent Decree" or "Decree" shall mean this Consent Decree and all appendices attached hereto.

e. "CSO Policy" shall mean EPA's "Combined Sewer Overflow (CSO) Policy," which was published in the Federal Register on April 19, 1994 (59 Fed Reg. 18688).

f. "Day" shall mean a calendar day unless expressly stated to be a business day. In computing any period of time under this Consent Decree, where the last day would fall

- 3 -

on a Saturday, Sunday, or federal holiday, the period shall run until the close of business of the next business day.

g. "Defendant" or "the City" shall mean the City of Portsmouth, New Hampshire.

h. "EPA" shall mean the United States Environmental Protection Agency and any of its successor departments or agencies.

i. "Effective Date" shall mean the date upon which this Consent Decree is entered by the Court or a motion to enter the Consent Decree is granted, whichever occurs first, as recorded on the Court's docket, pursuant to Section XIII.

j. "Facility" shall mean the City's publicly owned treatment works, treatment plant, all collection systems, the collection tributaries thereto, and all appurtenances to the treatment plant and collection systems, except Combined Sewer Overflow Facilities.

k. "Long-Term Control Plan" or "LTCP" shall mean the plan for all capital and process improvements and additions necessary to bring the Sewer System into compliance with all applicable federal and state laws and regulations with respect to CSO Discharges.

l. "NHDES" shall mean the New Hampshire Department of Environmental Services.

m. "Nine Minimum Controls" shall mean the measures defined in the CSO Policy and presented in the City Nine Minimum Controls Compliance Plan dated January 14, 1997 and as updated by the Wastewater Master Plan. (Appendix A).

n. "Paragraph" shall mean a portion of this Consent Decree identified by an arabic numeral.

- 4 -

o. "Parties" shall mean the United States, the State, and the City.

p. "Section" shall mean a portion of this Consent Decree identified by a roman numeral.

q. "Sewer System" shall mean the pipes, structures, and appurtenances owned and/or operated by the City that collect and convey sewage and stormwater to the wastewater treatment plant, and during wet weather, to the outfalls identified in NPDES Permit No. NH0100234.

r. "State" shall mean the State of New Hampshire.

s. "United States" shall mean the United States of America, acting on behalf of EPA.

t. "Wastewater Master Plan" or "WMP" shall mean the Plan developed to comply with the secondary treatment and CSO abatement requirements in NPDES Permit No. NH0100234. "WMP Scope of Work" or "WMP SOW" shall mean the proposed Scope of Work submitted to EPA on May 17, 2007, including any modifications pursuant to Paragraph 66.

u. "Wastewater Treatment Facilities" or "WWTF" shall mean the Pierce Island Wastewater Treatment Facility, the Pease Development Authority Wastewater Treatment Facility, any additional secondary treatment plants, as well as all appurtenances, additions, or improvements thereto, including the plant headworks and all facilities downstream of the headworks.

IV. <u>COMPLIANCE REQUIREMENTS</u>

8. <u>Nine Minimum Controls Compliance Plan</u>. Attached as Appendix A is the Nine Minimum Controls Compliance Plan. The City shall implement the Nine Minimum Controls

- 5 -

Compliance Plan in accordance with the schedule specified in Appendix A.

9. <u>Wastewater Master Plan</u>. 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.

10. <u>Combined Sewer Overflow Facility Upgrades</u>. 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 projects listed below by October, 2013:

		Project Start Date	Project Completion Date
Planning Area I.D.	Contract I.D.		
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

11. <u>Interim Emissions/Effluent Limits</u>. 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.

12. <u>Post Construction Monitoring Plan</u>: In conjunction with the City's submittal of the LTCP Update pursuant to Paragraph 9, the City shall submit to EPA for approval a work plan for conducting an ongoing study or series of studies to begin after construction is complete ("Post-Construction Monitoring Plan") to help determine: i) whether the LTCP measures, when completed, meet all design criteria and performance criteria specified in the LTCP; ii) whether the Combined Sewer Overflow Facility, and the WWTFs with respect to the treatment of combined sewage, comply with the technology-based and water-quality-based requirements of the CWA, the CSO Policy, and all applicable federal and state regulations and permits; and iii) that there are no CSO Discharges.

a. The Post-Construction Monitoring Plan shall contain a schedule for performance of the study or series of studies at key points during the course of the implementation of the measures, as well as after completion of the measures, specified in the LTCP. The Post-Construction Monitoring Plan also shall indicate the years (at least biannually) in which data generated during implementation of the Post-Construction Monitoring Plan will be submitted in reports to EPA.

b. EPA may approve the Post-Construction Monitoring Plan, or may decline to approve it and provide written comments. Within sixty (60) days of receiving EPA's comments, the City shall either: i) alter the Post-Construction Monitoring Plan consistent with EPA's comments and resubmit the Plan to EPA for final approval; or ii) submit the matter for dispute resolution under Section VIII.

c. Upon final approval of the Post Construction Monitoring Plan, the City shall implement, in accordance with the schedule therein, the Post-Construction Monitoring Plan. If the results of the Post-Construction Monitoring Plan indicate areas of non-compliance, the City shall, within sixty days, submit to EPA a Supplemental Compliance Plan which includes the actions that the City will take to achieve compliance and a schedule for taking such actions. Upon approval by EPA, the City shall implement the Supplemental Compliance Plan, in accordance with the schedule specified in the approved Plan.

- 7 -

d. Within one hundred twenty (120) days after complete implementation of the Post-Construction Monitoring Plan, the City shall submit a Final Post-Construction Monitoring Report to EPA for review, comment, and approval, that:

i) demonstrates that the City performed the Post-Construction
 Monitoring Plan in accordance with the approved Plan and schedule set
 forth in the approved Plan; and

ii) summarizes the data collected pursuant to the Post-Construction Monitoring Plan and analyzes whether the completed control measures have met and/or are meeting the design and performance criteria specified in the LTCP and whether the Combined Sewer Overflow Facility, and the WWTFs with respect to the treatment of combined sewage, comply with the requirements of the CWA, the CSO Policy, and all applicable federal and state regulations and permits.

e. EPA may approve the Final Post-Construction Monitoring Report, or may decline to approve it and provide written comments. Within sixty (60) days of receiving EPA's comments, the City shall either: i) alter the Final Post-Construction Monitoring Report consistent with EPA's comments and resubmit the Report to EPA for final approval; or ii) submit the matter for dispute resolution under Section VIII. Approval of the Final Post-Construction Monitoring Report constitutes only EPA's approval that the report contains the information required by this Paragraph. Such approval does not mean that EPA believes that the City has complied with any other requirement of this Consent Decree or federal or state law.

13. <u>Final Deadline</u>. The City shall complete all requirements in Paragraphs 8 through

- 8 -

10 in accordance with the schedules and deadlines contained therein and in the referenced Appendices.

14. <u>Approval of Deliverables</u>. After review of any plan, report, or other item that is required to be submitted pursuant to this Consent Decree, EPA and the State shall in writing:
(a) approve the submission; (b) approve the submission upon specified conditions; (c) approve part of the submission and disapprove the remainder; or (d) disapprove the submission.

15. If the submission is approved pursuant to Paragraph 14 the City shall take all actions required by the plan, report, or other document, in accordance with the schedules and requirements of the plan, report, or other document, as approved. If the submission is conditionally approved or approved only in part, pursuant to Paragraph 14(b) or 14(c), the City shall, upon written direction from EPA and the State, take all actions required by the approved plan, report, or other item that EPA and the State determines are technically severable from any disapproved portions, subject to the City's right to dispute only the specified conditions or the disapproved portions under Section VIII.

16. If the submission is disapproved in whole or in part pursuant to Paragraph 14(c) or 14(d), the City shall, within 45 Days or such other time as the Parties agree to in writing, correct all deficiencies and resubmit the plan, report, or other item, or disapproved portion thereof, for approval, in accordance with the preceding Paragraphs. If the resubmission is approved in whole or in part, the City shall proceed in accordance with the preceding Paragraph.

17. Any stipulated penalties applicable to the original submission, as provided in Section VI, shall accrue during the 45-Day period or other specified period, but shall not be payable unless the resubmission is untimely or is disapproved in whole or in part; provided that,

- 9 -

if the original submission was so deficient as to constitute a material breach of the City's obligations under this Consent Decree, the stipulated penalties applicable to the original submission shall be due and payable notwithstanding any subsequent resubmission.

18. If a resubmitted plan, report, or other item, or portion thereof, is disapproved in whole or in part, EPA and the State may again require the City to correct any deficiencies, in accordance with the preceding Paragraphs, or may themselves correct any deficiencies, subject to the City's right to invoke Dispute Resolution and the right of EPA and the State to seek stipulated penalties as provided in the preceding Paragraph.

19. Where any compliance obligation under this Section requires the City to obtain a federal, state, or local permit or approval, the City shall submit timely and complete applications and take all other actions necessary to obtain all such permits or approvals. The City may seek relief under the provisions of Section VII for any delay in the performance of any such obligation resulting from a failure to obtain, or a delay in obtaining, any permit or approval required to fulfill such obligation if the City has submitted timely and complete applications and has taken all other actions necessary to obtain all such permits or approvals.

#### V. <u>REPORTING REQUIREMENTS</u>

20. The City shall submit the following reports:

a. 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

- 10 -

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.

b. The report also shall include a description of any non-compliance with the requirements of this Consent Decree and an explanation of the violation's likely cause and of the remedial steps taken, or to be taken, to prevent or minimize such violation. If the cause of a violation cannot be fully explained at the time the report is due, the City shall so state in the report. The City shall investigate the cause of the violation and shall then submit an amendment to the report, including a full explanation of the cause of the violation, within 45 Days of the Day the City becomes aware of the cause of the violation. Nothing in this Paragraph or the following Paragraph relieves the City of its obligation to provide the notice required by Section VII. If the City violates, or has reason to believe that it may violate, any requirement of this Consent Decree, the City shall notify the United States and the State of such violation and its likely duration, in writing, within 15 working Days of the Day the City first becomes aware of the violation's likely cause and of the remedial steps taken, or to be taken, to prevent or minimize such violation.

21. Whenever any violation of this Consent Decree or any other event affecting the City's performance under this Decree, or the performance of the Facility, may pose an immediate threat to the public health or welfare or the environment, the City shall notify EPA and the State orally or by electronic or facsimile transmission as soon as possible, but no later than 24 hours after the City first knew of the violation or event. This procedure is in addition to the requirements set forth in the preceding Paragraph.

- 11 -

- 22. All reports shall be submitted to the persons designated in Section XII.
- 23. Each report submitted by the City under this Section shall be signed by an official

of the submitting party and include the following certification:

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.

This certification requirement does not apply to emergency or similar notifications where compliance would be impractical.

24. The reporting requirements of this Consent Decree do not relieve the City of any reporting obligations required by the CWA or its implementing regulations, or by any other federal, state, or local law, regulation, permit, or other requirement.

25. Any information provided pursuant to this Consent Decree may be used by the United States in any proceeding to enforce the provisions of this Consent Decree and as otherwise permitted by law.

### VI. <u>STIPULATED PENALTIES</u>

26. The City shall be liable to the United States and the State for stipulated penalties for violations of this Consent Decree as specified below, unless excused under Section VII. A violation includes failing to perform any obligation required by the terms of this Consent Decree, including any work plan or schedule approved under this Decree, according to all applicable requirements of this Consent Decree and within the specified time schedules established by or approved under this Decree.

27. <u>Interim Effluent Limits</u>. The following stipulated penalties shall accrue per

violation per Day for each violation of a requirement of Paragraph 11:

Penalty Per Violation Per Day	Period of Noncompliance
\$ 500	1st through 14th Day
<b>\$</b> 750	15th through 30th Day
\$1,000	31st Day and beyond

# 28. <u>Compliance Milestones</u>.

a. The following stipulated penalties shall accrue per violation per Day for

each violation of the requirements identified in subparagraph 28.b.:

Penalty Per Violation Per Day	Period of Noncompliance
\$ 500	1st through 14th Day
\$ 750	15th through 30th Day
\$1,000	31st Day and beyond

b. Failure to comply with the following milestones, including the submission

of any required progress reports (other than those covered by Paragraph 29 below), plans, or

other deliverables shall be subject to the penalties set forth in subparagraph (a):

- i. implement the Nine Minimum Controls Compliance Plan pursuant to Paragraph 8;
- ii. implement the Wastewater Management Plan pursuant to Paragraph 9;
- iii. implement the CSO LTCP pursuant to Paragraph 10; and
- iv. implement the Post-Construction Monitoring Plan pursuant to Paragraph 12.
- 29. <u>Reporting Requirements</u>. The following stipulated penalties shall accrue per

violation per Day for each violation of the reporting requirements of Section V:

Penalty Per Violation Per Day	Period of Noncompliance
\$ 500	1st through 14th Day
\$ 750	15th through 30th Day
\$1,000	31st Day and beyond

30. Stipulated penalties under this Section shall begin to accrue on the Day after performance is due or on the Day a violation occurs, whichever is applicable, and shall continue to accrue until performance is satisfactorily completed or until the violation ceases. Stipulated penalties shall accrue simultaneously for separate violations of this Consent Decree.

31. The City shall pay stipulated penalties to the United States and the State within 10 Days of a written demand by either Plaintiff. The City shall pay 50 percent of the total stipulated penalty amount due to the United States and 50 percent to the State. The Plaintiff making a demand for payment of a stipulated penalty shall simultaneously send a copy of the demand to the other Plaintiff.

32. The United States may, in the unreviewable exercise of its discretion, reduce or waive stipulated penalties otherwise due under this Consent Decree.

33. Stipulated penalties shall continue to accrue during any period of DisputeResolution, but need not be paid until the following:

a. If the dispute is resolved by agreement or by a decision of EPA that is not appealed to the Court, the City shall pay accrued penalties determined to be owing, together with interest, within 30 Days of the effective date of the agreement or the receipt of EPA's decision or order.

b. If the dispute is appealed to the Court and the United States prevails in whole or in part, the City shall pay all accrued penalties determined by the Court to be owing,

together with interest, within 60 Days of receiving the Court's decision or order, except as provided in subparagraph c, below.

c. If any Party appeals the District Court's decision, the City shall pay all accrued penalties determined to be owing, together with interest, within 15 Days of receiving the final appellate court decision.

34. The City shall pay stipulated penalties owing to the United States by FedWire Electronic Funds Transfer ("EFT") to the U.S. Department of Justice in accordance with written instructions to be provided to the City, following lodging of the Consent Decree, by the Financial Litigation Unit of the U.S. Attorney's Office for the District of New Hampshire, 53 Pleasant St., Concord, NH, 03301. At the time of payment, the City shall send a copy of the EFT authorization form and the EFT transaction record, together with a transmittal letter, which shall state that the payment is for stipulated penalties owed pursuant to the Consent Decree in <u>United States v. City of Portsmouth, New Hampshire</u>, shall state the violations for which the stipulated penalties are due, and shall reference the civil action number and DOJ case number 90-5-1-1-09308, to the United States in accordance with Section XII; by email to <u>acctsreceivable.CINWD</u> @epa.gov; and by mail to:

EPA Cincinnati Finance Office 26 Martin Luther King Drive Cincinnati, Ohio 45268

The City shall pay stipulated penalties owing to the State shall be made by certified or cashier's check payable to the "Treasurer, State of New Hampshire" and shall be delivered to the Department of Justice, Environmental Protection Bureau, 33 Capitol Street, Concord, New Hampshire, 03301, Attn: Allen Brooks, Esq. Payments shall be accompanied by a reference to

this Consent Decree. Payments shall be made within seven days of receipt of written demand. If the City fails to pay stipulated penalties according to the terms of this Consent Decree, the City shall be liable for interest on such penalties, as provided for in 28U.S.C. §1961, accruing as of the date payment became due. Nothing in this Paragraph shall be construed to limit the United States or the State from seeking any remedy otherwise provided by law for the City's failure to pay any stipulated penalties.

35. Subject to the provisions of Section X, the stipulated penalties provided for in this Consent Decree shall be in addition to any other rights, remedies, or sanctions available to the United States for the City's violation of this Consent Decree or applicable law. The City expressly reserves any and all legal and equitable defenses that may be available to it with respect to such claims. Where a violation of this Consent Decree is also a violation of the CWA, the City shall be allowed a credit for any stipulated penalties paid against any statutory penalties imposed for such violation.

#### VII. FORCE MAJEURE

36. Force majeure," for purposes of this Consent Decree, is defined as any event arising from causes beyond the control of the City, of any entity controlled by the City, or of the City's contractors that delays or prevents the timely performance of any obligation under this Consent Decree despite the City's best efforts to fulfill the obligation. The requirement that the City exercise "best efforts to fulfill the obligation " includes using best efforts to anticipate any potential force majeure event and best efforts to address the effects of any such event i) as it is occurring, and ii) after it has occurred to prevent or minimize any resulting delay to the greatest extent possible. "Force Majeure" does not include the City's financial inability to perform any

- 16 -

obligation under this Consent Decree.

37. If any event occurs or has occurred that may delay the performance of any obligation under this Consent Decree, whether or not caused by a force majeure event, the City shall provide notice orally or by electronic or facsimile transmission to Joy Hilton of EPA, Region I within 72 hours of when the City first knew that the event might cause a delay. Within ten days thereafter, the City shall provide in writing to EPA and the State: an explanation and description of the reasons for the delay; the anticipated duration of the delay; all actions taken or to be taken to prevent or minimize the delay; a schedule for implementation of any measures to be taken to prevent or mitigate the delay or the effect of the delay; the City's rationale for attributing such delay to a force majeure event if it intends to assert such a claim; and a statement as to whether, in the opinion of the City, such event may cause or contribute to an endangerment to public health, welfare, or the environment. The City shall include with any notice all available documentation supporting the claim that the delay was attributable to a force majeure. Failure to comply with the above requirements shall preclude the City from asserting any claim of force majeure for that event for the period of time of such failure to comply and for any additional delay caused by such failure. The City shall be deemed to know of any circumstances of which the City, any entity controlled by the City, or the City's contractors knew or should have known.

38. If EPA, after a reasonable opportunity for review and comment by the State, agrees that the delay or anticipated delay is attributable to a force majeure event, the time for performance of the obligations under this Consent Decree that are affected by the force majeure event will be extended by EPA, after a reasonable opportunity for review and comment by the State, for such time as is necessary to complete those obligations and no stipulated penalties shall

- 17 -

be due for the extension period. An extension of the time for performance of the obligations affected by the force majeure event shall not, of itself, extend the time for performance of any other obligation. EPA will notify the City in writing of the length of the extension, if any, for performance of the obligations affected by the force majeure event.

39. If EPA, after a reasonable opportunity for review and comment by the State, does not agree that the delay or anticipated delay has been or will be caused by a force majeure event, EPA will notify the City in writing of its decision.

40. If the City elects to invoke the dispute resolution procedures set forth in Section VIII, it shall do so by sending the United States a written Notice of Dispute no later than 15 days after receipt of EPA's notice. In any such proceeding, the City shall have the burden of demonstrating by a preponderance of the evidence that the non-compliance, delay or anticipated delay has been or will be caused by a force majeure event, that the duration of the delay or the extension sought was or will be warranted under the circumstances, that best efforts were exercised to avoid and mitigate the effects of the delay, and that the City complied with the requirements of Paragraphs 37 and 38, above. If the City carries this burden, the delay at issue shall be deemed not to be a violation by the City of the affected obligation of this Consent Decree identified to EPA and the Court.

### VIII. DISPUTE RESOLUTION

41. Unless otherwise expressly provided for in this Consent Decree, the dispute resolution procedures of this Section shall be the exclusive mechanism to resolve disputes arising under or with respect to this Consent Decree. The City's failure to seek resolution of a dispute under this Section shall preclude the City from raising any such issue as a defense to an action by

- 18 -

the United States to enforce any obligation of the City arising under this Consent Decree.

42. <u>Informal Dispute Resolution</u>. Any dispute subject to Dispute Resolution under this Consent Decree shall first be the subject of informal negotiations. The dispute shall be considered to have arisen when the City sends the United States a written Notice of Dispute. Such Notice of Dispute shall state clearly the matter in dispute. The period of informal negotiations shall not exceed 30 Days from the date the dispute arises, unless that period is modified by written agreement. If the Parties cannot resolve a dispute by informal negotiations, then the position advanced by the United States shall be considered binding unless, within 30 Days after the conclusion of the informal negotiation period, the City invokes formal dispute resolution procedures as set forth below.

43. <u>Formal Dispute Resolution</u>. The City shall invoke formal dispute resolution procedures, within the time period provided in the preceding Paragraph, by serving on the United States a written Statement of Position regarding the matter in dispute. The Statement of Position shall include, but need not be limited to, any factual data, analysis, or opinion supporting the City's position and any supporting documentation relied upon by the City.

44. The United States shall serve its Statement of Position within 30 Days of receipt of the City's Statement of Position. The United States' Statement of Position shall include, but need not be limited to, any factual data, analysis, or opinion supporting that position and any supporting documentation relied upon by the United States. The United States' Statement of Position shall be binding on the City, unless the City files a motion for judicial review of the dispute in accordance with the following Paragraph. The formal dispute resolution period shall not exceed 30 days unless a longer period is agreed to by the parties in writing.

- 19 -

45. The City may seek judicial review of the dispute by filing with the Court and serving on the United States, in accordance with Section XII, a motion requesting judicial resolution of the dispute. The motion must be filed within 20 Days of receipt of the United States' position pursuant to the preceding Paragraph. The motion shall contain a written statement of the City's position on the matter in dispute, including any supporting factual data, analysis, opinion, or documentation, and shall set forth the relief requested and any schedule within which the dispute must be resolved for orderly implementation of the Consent Decree.

46. The United States shall respond to the City's motion within the time period allowed by the Local Rules of this Court. The City may file a reply memorandum, to the extent permitted by the Local Rules.

47. <u>Standard Review</u>.

a. <u>Disputes Concerning Matters Accorded Record Review</u>. Except as otherwise provided in this Consent Decree, in any dispute brought under Paragraph 46 pertaining to the adequacy or appropriateness of plans, procedures to implement plans, schedules, or any other items requiring approval by EPA under this Consent Decree, the adequacy of the performance of work undertaken pursuant to this Consent Decree, and all other disputes that are accorded review on the administrative record under applicable principles of administrative law, the City shall have the burden of demonstrating, based on the administrative record, that the position of the United States is arbitrary and capricious or otherwise not in accordance with law.

b. <u>Other Disputes</u>. Except as otherwise provided in this Consent Decree, in any other dispute brought under Section VIII, the City shall bear the burden of demonstrating that its position complies with this Consent Decree.

- 20 -

48. The invocation of dispute resolution procedures under this Section shall not, by itself, extend, postpone, or affect in any way any obligation of the City under this Consent Decree, unless and until final resolution of the dispute so provides. Stipulated penalties with respect to the disputed matter shall continue to accrue from the first Day of noncompliance, but payment shall be stayed pending resolution of the dispute as provided in Paragraph 33. If the City does not prevail on the disputed issue, stipulated penalties shall be assessed and paid as provided in Section VI.

#### IX. INFORMATION COLLECTION AND RETENTION

49. The United States, the State, and their representatives, including attorneys, contractors, and consultants, shall have the right of entry into the Facility at all reasonable times, upon presentation of credentials, to:

a. monitor the progress of activities required under this Consent Decree;

b. verify any data or information submitted to the United States or the State in accordance with the terms of this Consent Decree;

c. obtain samples and, upon request, splits of any samples taken by the City or its representatives, contractors, or consultants;

d. obtain documentary evidence, including photographs and similar data; and

e. assess the City's compliance with this Consent Decree.

50. Upon request, the City shall provide EPA and the State or their authorized representatives splits of any samples taken by the City. Upon request, EPA and the State shall provide the City splits of any samples taken by EPA or the State.

51. Until five years after the termination of this Consent Decree, the City shall retain,

- 21 -

and shall instruct its contractors and agents to preserve, all non-identical copies of all documents, records, or other information (including documents, records, or other information in electronic form) in its or its contractors' or agents' possession or control, or that come into its or its contractors' or agents' possession or control, that relate in any manner to the City's performance of its obligations under this Consent Decree. This information-retention requirement shall apply regardless of any contrary corporate or institutional policies or procedures. At any time during this information-retention period, upon request by the United States or the State, the City shall provide copies of any documents, records, or other information required to be maintained under this Paragraph. At the conclusion of the information-retention period provided in this Paragraph, the City shall notify the United States and the State at least 90 Days prior to the destruction of any documents, records, or other information subject to the requirements of this Paragraph and, upon request by the United States or the State, the City shall deliver any such documents, records, or other information to EPA or the State. The City may assert that certain documents, records, or other information is privileged under the attorney-client privilege or any other privilege recognized by federal law. If the City asserts such a privilege, it shall provide the following: i) the title of the document, record, or information; ii) the date of the document, record, or information; iii) the name and title of each author of the document, record, or information; iv) the name and title of each addressee and recipient of the document, record, or information; v) a description of the subject of the document, record, or information; and vi) the privilege asserted by the City. However, no documents, records, or other information created or generated pursuant to the requirements of this Consent Decree shall be withheld on grounds of privilege.

- 22 -

52. The City may also assert that information required to be provided under this Section is protected as Confidential Business Information ("CBI") under 40 C.F.R. Part 2. As to any information that the City seeks to protect as CBI, the City shall follow the procedures set forth in 40 C.F.R. Part 2.

53. This Consent Decree in no way limits or affects any right of entry and inspection, or any right to obtain information, held by the United States or the State pursuant to applicable federal or state laws, regulations, or permits, nor does it limit or affect any duty or obligation of the City to maintain documents, records, or other information imposed by applicable federal or state laws, regulations, or permits.

#### X. <u>EFFECT OF SETTLEMENT/RESERVATION OF RIGHTS</u>

54. This Consent Decree resolves the civil claims of the United States and the State for the violations alleged in the Complaints filed in this action through the date of lodging.

55. The United States and the State reserve all legal and equitable remedies available to enforce the provisions of this Consent Decree, except as expressly stated in Paragraph 54. This Consent Decree shall not be construed to limit the rights of the United States or the State to obtain penalties or injunctive relief under the Act or implementing regulations, or under other federal or state laws, regulations, or permit conditions, except as expressly specified in Paragraph 54. The United States and the State further reserve all legal and equitable remedies to address any imminent and substantial endangerment to the public health or welfare or the environment arising at, or posed by, the Facility, whether related to the violations addressed in this Consent Decree or otherwise.

56. In any subsequent administrative or judicial proceeding initiated by the United

- 23 -

States or the State for injunctive relief, civil penalties, or other appropriate relief relating to the Facility or the City's violations, the City shall not assert, and may not maintain, any defense or claim based upon the principles of waiver, res judicata, collateral estoppel, issue preclusion, claim preclusion, claim-splitting, or other defenses based upon any contention that the claims raised by the United States or the State in the subsequent proceeding were or should have been brought in the instant case, except with respect to claims that have been specifically resolved pursuant to Paragraph 54 of this Section.

57. This Consent Decree is not a permit, or a modification of any permit, under any federal, State, or local laws or regulations. The City is responsible for achieving and maintaining complete compliance with all applicable federal, State, and local laws, regulations, and permits, and the City's compliance with this Consent Decree shall be no defense to any action commenced pursuant to any such laws, regulations, or permits, except as set forth herein. The United States and the State do not, by their consent to the entry of this Consent Decree, warrant or aver in any manner that the City's compliance with any aspect of this Consent Decree will result in compliance with provisions of the CWA, 33 U.S.C. §1251, <u>et seq.</u>, or with any other provisions of federal, State, or local laws, regulations, or permits.

58. This Consent Decree does not limit or affect the rights of the City or of the United States or the State against any third parties not party to this Consent Decree, nor does it limit the rights of third parties not party to this Consent Decree against the City, except as otherwise provided by law.

59. This Consent Decree shall not be construed to create rights in, or grant any cause of action to, any third party not party to this Consent Decree.

- 24 -

## XI. <u>COSTS</u>

60. The Parties shall bear their own costs of this action, including attorneys' fees, except that the United States and the State shall be entitled to collect the costs (including attorneys' fees) incurred in any action necessary to collect any portion of the civil penalty or any stipulated penalties due but not paid by the City.

# XII. NOTICES

61. Unless otherwise specified herein, whenever notifications, submissions, or

communications are required by this Consent Decree, they shall be made in writing and

addressed as follows:

To the United States:

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

and

Chief, Environmental Enforcement Section Environment and Natural Resources Division U.S. Department of Justice Box 7611 Ben Franklin Station Washington, DC 20044-7611 Re: DOJ No. 90-5-1-1-09308

and

Joy Hilton (SEW) U.S. Environmental Protection Agency, Region 1 One Congress Street Boston, MA 02114

To the State:

Tracy L. Wood, P.E. NHDES Wastewater Engineering Bureau 29 Hazen Drive, P.O. Box 95 Concord, NH 03302-0095

And

Allen Brooks, Esq. Department of Justice, Environmental Protection Bureau 33 Capitol Street Concord, NH 03301

To the City:

City Engineer City of Portsmouth 680 Peverly Hill Road Portsmouth, NH 03801

And

City Attorney City of Portsmouth 1 Junkins Avenue Portsmouth, NH 03801

62. Any Party may, by written notice to the other Parties, change its designated notice recipient or notice address provided above.

63. Notices submitted pursuant to this Section shall be deemed submitted upon mailing, unless otherwise provided in this Consent Decree or by mutual agreement of the Parties

in writing.

### XIII. <u>EFFECTIVE DATE</u>

64. The Effective Date of this Consent Decree shall be the date upon which this

Consent Decree is entered by the Court or a motion to enter the Consent Decree is granted,

whichever occurs first, as recorded on the Court's docket; provided, however, that the City

hereby agrees that it shall be bound to perform duties scheduled to occur prior to the Effective Date. In the event the United States withdraws or withholds consent to this Consent Decree before entry, or the Court declines to enter the Consent Decree, then the preceding requirement to perform duties scheduled to occur before the Effective Date shall terminate.

### XIV. <u>RETENTION OF JURISDICTION</u>

65. The Court shall retain jurisdiction over this case until termination of this Consent Decree for the purpose of resolving disputes arising under this Decree or entering orders modifying this Decree, pursuant to Sections VIII and XV, or effectuating or enforcing compliance with the terms of this Decree.

### XV. MODIFICATION

66. The terms of this Consent Decree, including any attached appendices, may be modified only by a subsequent written agreement signed by all the Parties. Where the modification constitutes a material change to this Consent Decree, it shall be effective only upon approval by the Court.

67. Any disputes concerning modification of this Consent Decree shall be resolved pursuant to Section VIII; provided, however, that instead of the burden of proof provided by Paragraph 48(b), the Party seeking the modification bears the burden of demonstrating that it is entitled to the requested modification in accordance with the grounds for relief specified in Federal Rule of Civil Procedure 60(b).

#### VI. <u>TERMINATION</u>

68. After the City has completed the requirements of Section V, has thereafter maintained continuous compliance with this Consent Decree and any applicable permit(s) for a period of one year, and has paid any accrued stipulated penalties as required by this Consent Decree, the City may serve upon the United States and the State a Request for Termination, together with all necessary supporting documentation, stating that the City has satisfied those requirements.

69. Following receipt by the United States and the State of the City's Request for Termination, the Parties shall confer informally concerning the Request and any disagreement that the Parties may have as to whether the City has satisfactorily complied with the requirements for termination of this Consent Decree. If the United States, after consultation with the State, agrees that the Consent Decree may be terminated, the Parties shall submit, for the Court's approval, a joint stipulation terminating the Decree.

70. If the United States, after consultation with the State, does not agree that the
Consent Decree may be terminated, the City may invoke Dispute Resolution under Section VIII.
However, the City shall not seek Dispute Resolution of any dispute regarding termination until
60 days after service of its Request for Termination.

## XVII. PUBLIC PARTICIPATION

71. This Consent Decree shall be lodged with the Court for a period of not less than 30 Days for public notice and comment in accordance with 28 C.F.R. §\_50.7. The United States reserves the right to withdraw or withhold its consent if the comments regarding the Consent Decree disclose facts or considerations indicating that the Consent Decree is inappropriate,

- 28 -

improper, or inadequate. The City consents to entry of this Consent Decree without further notice and agrees not to withdraw from or oppose entry of this Consent Decree by the Court or to challenge any provision of the Decree, unless the United States has notified the City in writing that it no longer supports entry of the Decree.

#### XVIII. <u>SIGNATORIES/SERVICE</u>

72. Each undersigned representative of the City, the State, and the Assistant Attorney General for the Environment and Natural Resources Division of the Department of Justice certifies that he or she is fully authorized to enter into the terms and conditions of this Consent Decree and to execute and legally bind the Party he or she represents to this document.

73. This Consent Decree may be signed in counterparts, and its validity shall not be challenged on that basis. The City agrees to accept service of process by mail with respect to all matters arising under or relating to this Consent Decree and to waive the formal service requirements set forth in Rules 4 and 5 of the Federal Rules of Civil Procedure and any applicable Local Rules of this Court, including, but not limited to, service of a summons.

## XIX. INTEGRATION

74. This Consent Decree constitutes the final, complete, and exclusive agreement and understanding among the Parties with respect to the settlement embodied in the Decree and supercedes all prior agreements and understandings, whether oral or written, concerning the settlement embodied herein. Other than deliverables that are subsequently submitted and approved pursuant to this Consent Decree, no other document, nor any representation, inducement, agreement, understanding, or promise, constitutes any part of this Decree or the settlement it represents, nor shall it be used in construing the terms of this Decree.

- 29 -

# XX. <u>APPENDICES</u>

75. The following appendices are attached to and are part of this Consent Decree:

Appendix A: Nine Minimum Controls Compliance Plan
Appendix B: Wastewater Master Plan Scope of Work
Appendix B.1: Milestones and Schedules
Appendix C: Interim Emissions/Effluent Limits

# XXI. FINAL JUDGMENT

76. Upon approval and entry of this Consent Decree by the Court, this Consent

Decree shall constitute a final judgment of the Court as to the United States, the State, and the

City.

Dated and entered this \_\_\_\_\_ day of \_\_\_\_\_, 2009.

UNITED STATES DISTRICT JUDGE District of New Hampshire

# FOR PLAINTIFF THE UNITED STATES OF AMERICA:

JOHN C. CRUDEN Acting Assistant Attorney General Environment and Natural Resources Division United States Department of Justice

09

PETER M. FLYNN Senior Attorney Environmental Enforcement Section United States Department of Justice P.O. Box 7611 Washington, D.C. 20044-7611 (202) 514-4352

JOHN P. KACAVAS United States Attorney District of New Hampshire

T. David Plourde Assistant United States Attorney NH Bar Number 2044 53 Pleasant Street, 4th Floor Concord, NH 03301-3904 (603) 225-1552 (603) 225-1470 (fax) For the UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Mark Polkins Director Water Enforcement Division Office of Enforcement and Compliance Assurance United States Environmental Protection Agency 1200 Pennsylvania Avenue, N.W. Washington, DC 20460

8/12/09 DATE

# For the UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, REGION I

Susan Studlien Director, Office of Environmental Stewardship United States Environmental Protection Agency, Region I One Congress Street – Suite 1100 Boston, Massachusetts 02114

08/11/09 DATE \_\_\_\_\_
For Plaintiff, the State of New Hampshire

State of New Hampshire Department of Environmental Services

By its attorneys, Orville B. Fitch II Deputy Attorney General Acting Attorney General

By: <u>8</u>/7/59 Lauren J. Noether, NH Bar 1881 Senior Assistant Attorney General Environmental Protection Bureau 33 Capitol Street Concord, NH 03301 603/271-3679 For Defendant, the City of Portsmouth, New Hampshire

By:\_

8-7-09

y: John P. Bohenko, City Manager Pursuant to vote of the City Council of <u>August 3</u>, 2009.

### APPENDIX A

Nine Minimum Controls Compliance Plan

.

### TABLE OF CONTENTS

SECTION 1 INTRODUCT	ΓΙΟΝ1
	ERATION AND REGULAR MAINTENANCE FOR THE SEWER SYSTEM AND CSO OUTFALLS
SECTION 3 MAXIMUM	USE OF THE COLLECTION SYSTEM FOR STORAGE
	D MODIFICATION OF PRETREATMENT REQUIREMENTS THAT CSO IMPACTS ARE MINIMIZED
SECTION 5 MAXIMIZAT	FION OF FLOW TO THE CITY'S WASTEWATER TREATMENT PLANT7
SECTION 6 ELIMINATIO	ON OF CSOS DURING DRY WEATHER8
SECTION 7 CONTROL C	OF SOLID AND FLOATABLE MATERIALS IN CSOS
SECTION 8 POLLUTION	PREVENTION PROGRAMS TO REDUCE CONTAMINANTS IN CSOS10
<b>RECEIVES</b> A	TIFICATION TO ENSURE THAT THE PUBLIC ADEQUATE NOTIFICATION OF CSO OCCURRENCES MPACTS, AND
	IG TO EFFECTIVELY CHARACTERIZE CSO IMPACTS FFICACY OF CSO CONTROLS12
	APPENDICES
Α.	APPROVED STATE REVOLVING LOAN APPLICATION
В.	COMBINED SEWER OVERFLOW ABATEMENT PROGRAM AND 201 FACILITIES PLAN UPDATE
C.	OPERATIONS AND MAINTENANCE PROGRAM
	APPENDICES (continued)
726NMC	i

- D. EMERGENCY PROCUREMENT PROCEDURES
- E. EXAMPLE OF CSO MONITORING DATA
- F. EDUCATIONAL MATERIAL

### **SECTION 1**

### INTRODUCTION

The City of Portsmouth owns and operates approximately 115 miles of sewer. The older portions are combined storm water and sanitary sewers. The collection system is separated into two major service areas, the northwestern section and southeastern section. Wastewater from both these sections flow to the Mechanic Street pump station where it is pumped to the City's 4.8 million gallon per day advanced primary treatment plant located on Pierce Island. Treated wastewater is then discharged to the Piscataqua River.

The original collection system had multiple CSO structures. During the 1980s all except two CSOs were eliminated. The two remaining CSOs, 010A and 010B, are located within the southeastern section of the City's collection system on Parrott Avenue and discharge to the South Mill Pond.

In 1990, the City entered into a Consent Decree (Civil No. 89-234-S) with the United States Environmental Protection Agency (USEPA) and the State of New Hampshire because of violations to the City's NPDES permit. In compliance with the Consent Decree, the City of Portsmouth completed a CSO Abatement Program in January 1991. This program recommended a number of projects and Best Management Practices the City should take to address their CSOs. The main recommendation of this Abatement Program was to install a swirl concentrator to provide primary treatment to the remaining CSOs that discharge into the South Mill Pond. The Abatement Program is currently being reviewed by the USEPA for approval.

The City of Portsmouth has identified CSO abatement as a Level I funding priority and has scheduled an update to their CSO Abatement Program for fiscal year 1997 -1998. This update will review the past five years of CSO and rain data to verify the original abatement recommendations are still valid. Since the original Abatement Program was submitted, the City has completed capital upgrades to their Mechanic Street pump station which have reduced the volume and duration of CSO events. The City's current CSO abatement program is scheduled in two phases. The first phase is an engineering study to update the CSO Abatement Program. The Second Phase is to design and construct the selected CSO abatement solution.

The City has packaged the CSO Abatement Program Update with a number of capital improvement projects to take advantage of low interest loans available through the State Revolving Funds (SRF) program and grant money available through the State Aid Grant program (SAG). This \$5.2 million Sewer Improvements Program includes a number of projects that will help further reduce the amount and frequency of CSO events. A copy of the approved SRF application is in Appendix A. The projects directly related to the CSOs include:

**Update the "Combined Sewer Overflow Abatement Program" -** Update the "Combined Sewer Overflow Abatement Program", dated January 1991 prepared by Whitman and Howard. The updated program will be based on additional flow information collected since the Mechanic Street and Deer Street pump stations have been upgraded. This update will review the combined sewer overflow (CSO) flows and verify the best abatement method. See Work Plan Proposal for

726NMC

"Combined Sewer Overflow Abatement Program and 201 Facilities Plan Update" dated July 30, 1996 attached in Appendix B.

**201 Facilities Plan** - The 201 Facilities Plan will update the 1977 plan prepared by Wright - Pierce. This update will determine the limiting factors within the collection system and treatment plant in order minimize the volume and occurrence of CSO events by maximizing the flow to the treatment plant. The updated 201 Facilities Plan will also allow the City to better project future capital requirements. See Work Plan Proposal for the "Combined Sewer Overflow Abatement Program and 201 Facilities Plan Update" prepared by Underwood Engineers dated July 30, 1996 attached in Appendix B.

**CSO Abatement Project Design -** This project will prepare plans and specifications for the construction of the best abatement process once it has been selected.

**Collection System Monitoring Program** - Installation of remote monitoring at the City's 17 pump stations via a telemetry system. Remote monitoring will allow continuous monitoring of the City's 17 pump station to better manage the collection system.

**Collection System Equipment Replacement -** Much of the City's collection system equipment has reached the end of their useful life and require replacement. This includes equipment that is used to maintain the combined sewer system (CSS) including:

Vactor Truck Sewer Cleaner Trash Pumps Rack Body Truck Dump Truck Backhoe/Loader Sewer Monitoring Truck Pickup Truck Sewer Collection Video Camera

**24 - Inch Force Main Replacement -** Replace 300 feet of 16 - inch force main under the Pierce Island bridge with 24 - inch force main. The existing 16 - inch force main has required a number of repairs due its deteriorated condition and is need replacement. Twenty four inch pipe will provide additional capacity and reduce head requirements.

**Borthwick Avenue Sewer Replacement** - Approximately 2,000 feet of interceptor on Borthwick Avenue is seriously degraded and is contributing I/I to the collection system. This project will replace the deteriorated line to minimize the excess flow.

**Combined Sewer Rehabilitation, Bartlett Street to Market Street -** This section of interceptor is seriously degraded and is contributing I/I to the collection system. This project will replace the deteriorate line to minimize the excess flow.

This document is intended to fulfill documentation requirements for the Nine Minimum Controls outlined by the USEPA in their 1994 CSO policy clarification. These Nine Minimum Controls are:

726NMC

- 1. Proper operation and regular maintenance programs for the sewer system and CSO outfalls.
- 2. Maximum use of the collection system for storage.
- 3. Review and modification of pretreatment requirements to ensure that CSO impacts are minimized.
- 4. Maximization of flow to the City's wastewater treatment plant.
- 5. Elimination of CSOs during dry weather.
- 6. Control of solid and floatable materials in CSOs.
- 7. Pollution prevention programs to reduce contaminants in CSOs.
- 8. Public notification to ensure that the public receives adequate notification of CSO occurrences and CSO impacts.
- 9. Monitoring to effectively characterize CSO impacts and the efficacy of CSO controls.

### **SECTION 2**

### PROPER OPERATION AND REGULAR MAINTENANCE PROGRAMS FOR THE SEWER SYSTEM AND CSO OUTFALLS

The first minimum control, proper operation and regular maintenance program, ensures that a CSS and treatment facility functions to maximize the flow that is conveyed to the treatment plant or is stored within the collection system before a CSO occurs. The City complies with this minimum control through its collection system maintenance program. As part of the 1991 CSO Abatement Program prepared by Whitman and Howard, additional maintenance and operation procedures were identified. The City has implemented an informal inspection program of its collection system to identify problem areas that could possibly restrict the use of the systems storage capacity. As part of the scheduled 201 Facilities Plan Update, the City will review their CSS maintenance procedures. An outline of their informal program is included in Appendix C. The program consists of:

The organizations and people responsible for various aspects of the O&M program.

The resources (i.e. people and dollars) allocated to O&M activities.

Planning and budgeting procedures for O&M of the CSS and treatment facilities. A list of facilities critical to the performance of the CSS maintenance.

Written procedures and schedules for routine, periodic maintenance of major items of equipment and CSO diversion facilities listed previously.

A process for periodic inspections of the facilities listed previously.

Written procedures, including procurement procedures, for responding to emergency situations. The City has an emergency purchasing procedure which allows for repair of equipment associated with the CSOs. A copy of these procedures and purchase order form is included in Appendix D.

As part of an on going review, the City is investigating changing the job descriptions of collection system personnel. This change will require a minimum of certification of Grade I Operator.

### **SECTION 3**

### MAXIMUM USE OF THE COLLECTION SYSTEM FOR STORAGE

As part of the 1991 CSO Abatement Program prepared by Whitman and Howard a hydraulic evaluation of the CSS associated with the remaining two CSOs was performed. This evaluation determined that the section of CSS connected to the CSOs was hydraulically limited with little storage capacity available. Further inspection of the collection system showed that increasing the capacity of the Mechanic Street pump station would help reduce the capacity problem. The City is in the process of compiling a formal maintenance and inspection program of its collection system to identify problem areas that could possibly restrict the use of the systems storage capacity. This program is being incorporated into the City's digitized GIS mapping system. In addition, during the 201 facilities program, the City will review their CSS maintenance procedures. Their non - written procedures include:

- Regular maintenance of CSO monitoring equipment.
- Tide gate maintenance and repair quarterly or as needed.
- Adjustment of regulator settings quarterly.
- As part of their regular collection system repair and replacement procedures the City eliminates infiltration and inflow when possible. In addition, the City's site review procedure requires new developments to upgrade the collection system to reduced inflow and infiltration based on the impact of the new development's wastewater flows.
- Requiring localized upstream detention for any new development that will affect downstream run off.
- The City has upgraded their Mechanic Street pump station to help reduce CSOs. The upgrade increased the pump station's capacity from 10.66 to 22.00 mgd. This upgrade was estimated by Moffa and Associates Consulting Engineers to have reduced CSO volume and occurrence by approximately 60%. Additional review of the CSO data and hydraulics will be performed as part of the CSO on of Pump Operations at Interceptor Lift Stations.
- The City has installed additional manholes to improve access to long stretches of CSS. These new manholes have allowed access to clean CSSs to remove obstructions that impede flow.

### **SECTION 4**

### **REVIEW AND MODIFICATION OF PRETREATMENT REQUIREMENTS TO ENSURE THAT CSO IMPACTS ARE MINIMIZED**

Objective of this control is to minimize the impacts of discharges into CSSs from non-domestic sources during wet weather events, and to minimize CSO occurrences by modifying inspection, reporting and oversight procedures within the approved pretreatment program. To minimize non-domestic impacts to CSOs, the City complies with the State of New Hampshire's pretreatment requirements. In addition, the City's site review requirements for new developments include erosion and sedimentation controls, three foot sumps on all new catch basins, and grit and oil separators for applicable facilities. During the CSO Abatement Program Update City's pretreatment program will reviewed and recommendations to improve it will be made, if necessary.

### **SECTION 5**

### MAXIMIZATION OF FLOW TO THE CITY'S WASTEWATER TREATMENT PLANT

Through its regular maintenance program the City has worked to maximize the capacity of its collection system. In addition to maintenance, the City has performed a number of capital improvement projects that have increased the capacity of the Mechanic Street pump station which pumps all the flow collected in the City to the Pierce Island plant. This upgrade increased the pump station's capacity from 10.66 mgd to 22 mgd which was estimated by Moffa and Associates Consulting Engineers to have reduced CSO volume and occurrence by approximately 60%. The CSO Abatement Program Update proposed by the City will review CSO flow and duration records and will revisit the hydraulics of the section of CSS directly linked to the CSO structures.

As part of their \$5.2 million Sewerage Improvements Program the City is updating their 201 Facilities plan. This update will evaluate the capacity of the existing plant to determine available capacity and how to maximize flow to the plant. The Facilities Plan update will estimate costs for any physical modifications and increased O&M costs for modifications to the plant to handle wet weather flows.

The 201 Facilities Plan Update will also determine capacity of major interceptors and pumping stations and their ability to deliver flow to the plant, identify additional maintenance that will help ensure full capacity is available. The Update will analyze existing records to compare flows processed by the plant during wet weather events and dry periods to determine the relationship between flow and performance.

### **SECTION 6**

### **ELIMINATION OF CSOS DURING DRY WEATHER**

Dry weather overflows were eliminated by modifications to the City's two remaining overflow structures. These modification included addition of stop logs to raise the required hydraulic grade necessary for flows to by-pass. Based on previous studies and data collected from continuous monitoring of the CSOs, there are currently no dry weather overflow events. Daily monitoring reports are sent to the State monthly. An example of the CSO monitoring data is shown in Appendix E.

### **SECTION 7**

### CONTROL OF SOLID AND FLOATABLE MATERIALS IN CSOS

The City controls solids and floatable through their regular street sweeping program, park maintenance, and leaf removal program. The maintenance programs associated with the CSOs will be reviewed and their effectiveness evaluated during the CSO Abatement Program Update.

In its on going effort to control solids and floatable materials from entering the CSS, the City has included the purchase of CSS maintenance equipment as part of the \$5.2 million Sewerage Improvements Program. This equipment includes a new vactor truck, sewer cleaner, and a sewer collection video camera. This equipment will be used to help in the City's effort to minimize solids and floatable materials from being discharged during CSO events.

### **SECTION 8**

### POLLUTION PREVENTION PROGRAMS TO REDUCE CONTAMINANTS IN CSOS

The seventh minimum control is intended to help prevent pollution from entering the CSS and the receiving water through the CSO. The strategies required to meet this minimum control involve activities such as street cleaning, public education programs, solid waste collection and recycling to minimize the amount of pollution entering into the CSS. As previously discussed in Section 7, the City has enacted a regular street sweeping program. The City also provides public trash cans to help reduce the amount of litter entering into the CSS. As part of their public education efforts the City includes educational materials in its water and sewer bills. The City also holds two household hazardous waste collection days each year. One in the Spring and one in the Fall. These events allow homeowners to dispose of various common household contaminants by bringing those items to the public works department. The products are identified, packed and disposed of by a licensed hazardous waste disposal firm. An example of the sewer educational and the household hazardous waste cleanup day educational material are shown in Appendix F.

The adequacy of the City's pollution control efforts will be reviewed as part of the CSO Abatement Program Update.

.

### **SECTION 9**

### PUBLIC NOTIFICATION TO ENSURE THAT THE PUBLIC RECEIVES ADEQUATE NOTIFICATION OF CSO OCCURRENCES AND CSO IMPACTS

Currently the City has no official notification procedure. As part of the CSO Abatement Program Update, adequacy of the City's current efforts will be reviewed and policies developed to address this requirement will be proposed if necessary.

726NMC

### **SECTION 10**

### MONITORING TO EFFECTIVELY CHARACTERIZE CSO IMPACTS AND THE EFFICIENCY OF CSO CONTROLS

Through continuous monitoring of their two remaining CSOs the City has developed a significant data base to help evaluate the effectiveness of the CSO control steps taken to date. The City currently monitors discharge flow from the two CSOs along with data in the associated interceptor. Rain data is also collected automatically. The data is digitally collected and reviewed monthly. This data has been submitted to the State with the City's monthly daily monitoring reports for the last five years. The previous CSO Abatement Program performed for the City by Whitman and Howard was based on a limited data set. Since that report was completed, capital improvement have been made and an additional six years of data has been collected. Before additional capital projects are pursued the City is going to update their CSO program. This update will revisit the conclusions of the previous report and determine the most cost effective way to control their CSOs.

In addition, the 210 Facilities Plan Update will review the effectiveness of efforts made thus far to reduce inflow and infiltration (I/I) throughout the City's collection system and will recommend steps reduce I/I further.

### APPENDIX B

Wastewater Master Plan Scope of Work

### City of Portsmouth, NH Wastewater Master Plan

Work Plan

Prepared by: Weston & Sampson, Inc. / Brown and Caldwell

The City of Portsmouth has undertaken this Wastewater Master Plan (WMP) in response to the denial of the 301(h) waiver from secondary treatment at the Peirce Island Wastewater Treatment Facility (WWTF). The denial of this waiver necessitates the revisiting of the City's long-term comprehensive planning for not only its two wastewater treatment facilities (WWTFs) – the advanced-primary Peirce Island WWTF and the secondary Pease Development Authority (PDA) WWTF - but for the abatement of its three remaining Combined Sewer Overflows (CSOs) as well. Thus, the WMP encompasses the elements of two distinct planning programs: a Wastewater Treatment Facilities Plan Update (WWTFP) and a CSO Long-Term Control Plan Update (LTCP). Because the planning will consider possible flow shedding, or re-direction, between the WWTFs and/or other sites, and problem areas within both the combined and separately sewered areas, all aspects of the City's wastewater infrastructure will be addressed in the WMP.

This Work Plan outlines the tasks to complete the comprehensive wastewater facilities plan and update to the LTCP to allow the selection of the most environmentally sound, sustainable and cost effective solution to meet current and foreseeable water quality standards.

Public participation as discussed in Task 11 of this Work Plan will be critical to the selection, acceptance and implementation of the final option. Public meetings will be held through-out the development of the WMP to both solicit input and present results. The City's Web site will be used to post meeting schedules as well as interim reports which will allow interested parties to track the progress of the WMP.

This study will be conducted in a manner consistent with the New Hampshire Department of Environmental Services State Revolving Fund loan program to maximize the grant and loan eligibility of the selected option. In addition, this study will look at means of reducing the financial impact to the users by identifying regional opportunities that may help reduce the capital cost to the current users. These opportunities such as regional septage, biosolids, and fats oils and grease (FOG) treatment (Tasks 3.4 and 3.5) may be incorporated into a new WWTF at an economy of scale which would reduce the cost to the regional players while at the same time contributing to the funding of a new WWTF.

The WMP will be undertaken by the following project team:

- Client: The City of Portsmouth, New Hampshire
- Planning Consultant Team: Weston & Sampson and Brown and Caldwell
- City Advisory Consultant: Underwood Engineers, Inc.

Page 1 of 16 May 17, 2007

### Task 1. Define Study Parameters And Develop Project Boundaries

The purpose of this task is to identify project parameters and to set the boundaries of the WMP. The parameters to be identified include geographic boundaries, political boundaries and public participation boundaries.

### 1.1. Three (3) meetings with project team will be held to define WMP parameters. The following subtasks will be performed:

- 1.1.1. Identify Study Area based on geographic and political boundaries.
- 1.1.2. Identify alternative wastewater treatment facility (WWTF) sites.
- 1.1.3. Identify regional communities that may be included in the Study Area. The Study Area identified in Task 1.1.1. may be modified based on the results of this Task.
  - 1.1.3.1. Review the New Hampshire Seacoast Regional Wastewater Management Study and identify stakeholders.
  - 1.1.3.2. Hold informal meetings with the City and officials from area communities to introduce the project.
- 1.1.4. Regional involvement may include the following entities:
- Newcastle
  Greenland
  - Pease Development Authority

• Newington

North Hampton

Rye

- The Seacoast Regional Wastewater Management Study
- 1.1.4.1. Perform a preliminary evaluation of need for the disposal of wastewater, biosolids, septage and fats, oils and grease (FOG) from surrounding communities.
- 1.1.4.2. In addition, other communities in the Seacoast Region may be included in the study for the purposes of providing regional biosolids, septage and fats, oils and grease (FOG) services in the context of WWTF capacity.
- 1.2. Define planning horizons for the WMP. Consideration will be given to equipment and structure life, land requirements and build-out conditions.
- 1.3. Define sustainability goals for the WMP based on the City's Global Master Plan and discussions with the City.

### Task 2. Regulatory Requirements Review

The purpose of this task is to review current regulatory requirements including permits, guidance documents, etc. and to identify regulatory agency requirements that will be imposed on the City for both the WWTFP and LTCP Updates.

- 2.1. Review pertinent EPA and NHDES documents and correspondence that are in the City's possession, including the following:
  - 2.1.1.1. Current NPDES permit
  - 2.1.1.2. Current Consent Decree (or modification there to)
  - 2.1.1.3. Pending Administrative Order
  - 2.1.1.4. New Consent Decree
- 2.2. Review EPA and NHDES WWTFP and LTCP Requirements and Guidance Documents.
- 2.3. Prepare for, coordinate and attend up to two (2) regulatory requirements meeting with EPA and NHDES to review and establish:
  - 2.3.1. Administrative Order and or Consent Decree findings, technical requirements, and schedule.
  - 2.3.2. WWTF Issues
    - 2.3.2.1. Site permitting issues, and
    - 2.3.2.2. Outfall permitting requirements and modeling requirements
    - 2.3.2.3. Possible future, more stringent effluent limitations (i.e. total Nitrogen)
  - 2.3.3. CSO LTCP
    - 2.3.3.1. CSO LTCP requirements
    - 2.3.3.2. Applicable water quality standards
    - 2.3.3.3. Pollutants of concern
    - 2.3.3.4. Control levels for treated CSO discharges (i.e., Presumptive or Demonstrative Approach per 1994 EPA CSO Control Policy)

- 2.3.3.5. Treatment levels for satellite and/or primary-bypassed CSO discharges (i.e., will bypassing be allowed or will blending be required)
- 2.3.3.6. How compliance will be established
- 2.4. Develop a regulatory requirements technical memorandum (TM) summarizing the findings of the above tasks.
  - 2.4.1. Provide a draft of the TM to the City for review.
  - 2.4.2. Meet with City to review Draft TM and solicit comments.
  - 2.4.3. Finalize Draft TM and submit to the City for submittal to NHDES and EPA.

### Task 3. Flow And Loads Forecasting

The purpose of this task is to forecast wastewater (dry weather) and stormwater (wet weather) flows and pollutant loadings for use in the planning process. Data outside of the Study Area will only be sought and evaluated if the wider regional biosolids, septage and FOG concept advances in the planning process.

### 3.1. Current sewered flows will be established based upon current zoning and the following efforts:

- 3.1.1. Evaluate past reports, pump station flow records, WWTF records, collection system metering and CSO flow records.
  - 3.1.1.1. Review and recommend, as necessary, improvements to data collection activities.
- 3.1.2. Collect, develop, and evaluate data to support development of flow including population data, water use records, land use, sewered area, basin boundaries, etc..
- 3.1.3. Define and determine wastewater generation rates for residential, commercial, and industrial customers.
- 3.1.4. Update existing report data summaries to current conditions based on the above tasks.
- 3.2. Septic flows and septic system failures will be identified to evaluate the need for increased septage receiving capacity within the Study Area and the need for sewer system extensions within the Study Area to areas with failed septic systems.

- 3.2.1. Estimates of biosolids generation, septage and FOG disposal needs from surrounding communities based on site visits and interviews with their WWTF staff, public works directors, DES staff and other appropriate parties.
- 3.2.2. Evaluate need for regional septage disposal based on:
  - 3.2.2.1. Septage receiving records for the Pease WWTF and WWTFs in communities within the Study Area.
  - 3.2.2.2. Informal interviews with commercial septage haulers that service the Study Area.
  - 3.2.2.3. Discussions with NHDES officials.
- 3.2.3. Review City records to quantify reported septic system failures.
- 3.2.4. Implement a septic system survey throughout the Study Area in areas where sewer system extensions tributary to the City's collection system are feasible to document need and establish funding eligibility.
- 3.2.5. Provide GIS data mapping information to City identifying septic system problem areas.

### 3.3. Future sewered flow projections will be developed based upon current zoning and the following:

- 3.3.1. Review open space availability based on the City's GIS system, Tax maps and available reports.
- 3.3.2. Attend two (2) meetings with City's Planning Department to determine areas of planned and potential sewered growth.
  - 3.3.2.1. Review proposed changes in zoning
- 3.3.3. Attend five (5) meetings with regional communities to determine areas of potential sewered growth outside the City of Portsmouth, and within the Study Area defined in Task 1.
- 3.3.4. Develop up to four (4) growth forecasts for the Study Area. These forecasts will be based on available growth data for the City, adjacent communities, and available regional planning efforts. Forecasts will include:
- Current baseline conditions
- 50 year forecast

20-year forecast

• Build-out conditions

Page 5 of 16 May 17, 2007

- 3.3.5. Develop up to four (4) flow/load forecast models based on the above tasks for various growth scenarios.
- 3.3.6. Develop a TM summarizing flow and load projections based on the above Task 3 efforts.
  - 3.3.6.1. Provide a draft of the TM to the City for review.
  - 3.3.6.2. Meet with City to review TM and solicit comments.
  - 3.3.6.3. Finalize TM and submit to the City.

### 3.4. The need for a biosolids handling facility within the Study Area, will be evaluated based on current biosolids production and disposal methods.

- 3.4.1. Establish regional biosolids generation projections based on growth forecasts, utilizing current conditions as a base line.
- 3.4.2. Determine biosolids handling capacities at WWTF's within the Study Area based on available data and evaluate the potential for regional biosolids handling.
- 3.4.3. Develop a TM summarizing the need for regional biosolids handling based on the above tasks.
  - 3.4.3.1. Provide a draft of the TM to the City for review.
  - 3.4.3.2. Meet with City to review TM and solicit comments.
  - 3.4.3.3. Finalize TM and submit to the City.

### 3.5. The need for a regional FOG handling facility within the Study Area will be evaluated based on current FOG receiving and disposal methods.

- 3.5.1. Establish regional FOG disposal projections based on growth forecasts, utilizing current conditions as a base line.
- 3.5.2. Determine FOG handling capacities at WWTF's within the Study Area based on available data and evaluate the potential for regional FOG handling.
- 3.5.3. Develop a TM summarizing the need for regional FOG handling based on the above tasks.
  - 3.5.3.1. Provide a draft of the TM to the City for review.
  - 3.5.3.2. Meet with City to review TM and solicit comments.

#### Page 6 of 16 May 17, 2007

### Task 4. Collection System Evaluation

The purpose of this task is to establish a base line for system performance for dry weather and wet weather flows within the current collection system and to project the impact of future flows on the collection system. The evaluation will be used as part of the development of the LTCP Update portion of the WMP.

### 4.1. Conduct field observations during up to three (3) significant storm events with City personnel to confirm problem areas.

4.1.1. Review existing mapping and other pertinent data regarding known problem areas.

# 4.2. Develop a flow/rain monitoring program to supplement the current program, if needed, for the purposes of both compliance monitoring and the Sewer System Model update.

- 4.2.1. Meet with City and review data on current flow monitoring programs.
  - 4.2.1.1. Evaluate current data collection efforts and recommend the following additional data collection methods, as required:
  - 4.2.1.2. To supplement existing data, identify up to 12 metering sites, up to six (6) groundwater monitoring sites, and up to three (3) rain gauge locations throughout the collection system.
  - 4.2.1.3. Install, operate and maintain flow meters and rain gauges, including data logging devices, for a period of up to 12 months.
  - 4.2.1.4. Install, operate and maintain piezometers and data logging devices for a period of up to 36 months.
  - 4.2.1.5. Analyze and process data on a monthly basis and make recommendations for changes, as appropriate.

#### 4.3. Review historical regulatory compliance for the combined system.

4.3.1. Confirm CSO control goals as established by NHDES and EPA in Task 2.

<sup>4.1.1.1.</sup> Document findings for incorporation in to Sewer System Model.

- 4.3.2. Assess compliance and success of current Nine Minimum Controls (NMC) implementation efforts.
- 4.3.3. Determine if additional activities to augment the NMC are warranted.
- 4.3.4. Evaluate success of recent abatement efforts.
  - 4.3.4.1. Incorporate representative flow data provided by the City for targeted sewer separation areas, pump station upgrades, and system optimization efforts into the Sewer System Model.
  - 4.3.4.2. Use the Sewer System Model to identify benefits of recent CSO abatement efforts.
- 4.3.5. Develop a TM summarizing the CSO abatement efforts and modeled benefits.
  - 4.3.5.1. Provide a draft of the TM to the City for review.
  - 4.3.5.2. Meet with City to review TM and solicit comments.
  - 4.3.5.3. Finalize TM and submit to the City.

### 4.4. The existing Sewer System Model will be updated based on current flow data and hydraulic conditions will be confirmed.

- 4.4.1. Sewer sub-systems will be added to the Sewer System Model, as needed, to establish baseline conditions by further refining hydraulic conditions and to evaluate flow shedding and re-direction options as detailed in later tasks.
- 4.4.2. Review historic data and information on the physical characteristics of the collection system facilities.
  - 4.4.2.1. Review available inspection and television reports, as necessary, to verify existing conditions and identify additional needs.
  - 4.4.2.2. Recommend additional inspection needs that may be warranted.
  - 4.4.2.3. Review City's sewer rehabilitation program and targeted sewer separation efforts to date.
- 4.4.3. Update hydrological data to:
  - 4.4.3.1. Characterize I/I in sanitary system

#### Page 8 of 16 May 17, 2007

- 4.4.3.2. Develop "desk top" summary of extraneous flows using the last 4 years of available data.
- 4.4.3.3. Compile available rainfall, CSO, collection system and WWTF flow data and evaluate
  - Dry and wet weather WWTF hydraulic loadings
  - Dry and wet weather pump station flows
  - Current wet weather percent capture and CSO volumes
  - Duration and frequency of occurrence
  - Minimum storm event which triggers CSOs
  - Annual, seasonal and monthly statistics of CSO events
- 4.4.4. Update combined Sewer System Model to reflect recent modifications.
  - 4.4.4.1. Calibrate model to reflect existing conditions and generate a baseline model.
- 4.4.5. Evaluate hydraulic impacts of current planned and potential growth within City and regionally.
  - 4.4.5.1. Based on the results of Task 3, incorporate selected regional planning data into the Sewer System Model.
  - 4.4.5.2. Based on the results of Task 3, incorporate three (3) of the growth forecasts into the Sewer System Model to identify hydraulic restrictions and potential CSO impacts.
- 4.4.6. Develop a TM summarizing the baseline Sewer System Model and growth forecast impacts.
  - 4.4.6.1. Provide a draft of the TM to the City for review.
  - 4.4.6.2. Meet with City to review TM and solicit comments.
  - 4.4.6.3. Finalize Draft TM and submit to the City.
- 4.5. Evaluate the impacts of CSOs on receiving water quality.
  - 4.5.1. Review previous water quality data and projects from the 2005 LTCP Update and more recent reporting, if available, and determine if the water quality objectives are still attainable from a regulatory perspective.
  - 4.5.2. Depending on the results of the above tasks, the need for additional ambient water quality analysis will be recommended. This effort is not included in this Scope.

### Task 5. Alternatives Evaluation

The purpose of this task is to evaluate the full range of alternatives necessary to meet regulatory compliance including potential nutrient limits (i.e. total Nitrogen). This evaluation will conform with DES funding requirements and will evaluate a full range of alternative processes, technologies and practices for the WWTP and LTCP Updates.

### 5.1. Select decision-making process and decision making criteria.

#### 5.1.1. Prepare for and coordinate one (1) workshop for selection.

- 5.1.1.1. Submit TM summarizing decision making process and selection criteria to City for comment
- 5.1.1.2. Meet with City to discuss TM and modify as necessary.
- 5.1.1.3. Submit Final Draft TM to City
- 5.2. Public outreach meeting to discuss technologies, in concert with Task 11.
- 5.3. Perform environmental and societal evaluation of alternatives including but not limited to National Historic Preservation Act and National Environmental Policy Act.

#### 5.4. Evaluate and screen alternatives

- 5.4.1. Prepare "Talking Points" technology memo and submit to City.
- 5.4.2. Prepare for, coordinate, and attend workshop session with the City to develop "Range of Alternatives" and perform screening to develop a set of applicable alternatives.
- 5.4.3. Develop a TM summarizing the applicable alternatives.
  - 5.4.3.1. Provide a draft of the TM to the City for review.
  - 5.4.3.2. Meet with City to review TM and solicit comments.
  - 5.4.3.3. Finalize Draft TM and submit to the City.
- 5.5. From the screenings effort, evaluate up to four (4) feasible technologies to comply with regulatory requirements that may be implemented at each of three (3) potential WWTF sites (Peirce Island, Pease WWTF and a possible new WWTF site) and for the collection system. For each alternative, the following steps will be performed:
  - 5.5.1. Evaluation of WWTF alternatives:

- 5.5.1.1. For new sites (if needed), identify ownership, soil conditions, site constraints, regulatory constraints, etc.
- 5.5.1.2. Evaluate applicable treatment technologies for each site:
- 5.5.1.3. Dry weather flow options for the full secondary treatment of the dry weather component, with primary or advancedprimary treatment of wet weather flows.
- 5.5.1.4. Full secondary treatment of all dry and wet weather flows (only if required by EPA and NHDES).
- 5.5.1.5. Wet weather only options such as chemically enhanced primary treatment, vortex, ballasted sedimentation, compressed media filters, or other high-rate system, with dry weather flows treated at other locations.
- 5.5.2. Evaluation of collection system components of alternatives and impacts on LTCP:
  - 5.5.2.1. If flow shedding or re-direction of sewage flow is required for an alternative:
    - Evaluate flow shedding of various percentages of dry weather flows currently tributary to the Peirce Island WWTF, and/or
    - Evaluate flow shedding of flows currently tributary to the Pease WWTF to a new site. The Sewer System Model will be used in the analysis as needed.
  - 5.5.2.2. Identify collection system improvement needs
  - 5.5.2.3. For wet weather flows that will not be treated at existing or proposed WTF sites, evaluate treatment/mitigation alternatives that include, but are not limited to:
- Continued targeted or full sewer separation
- Satellite treatment using chemically enhanced primary treatment
- Vortex separation
- Compressed media filters

- Ballasted sedimentation
- Other high-rate treatment system
- Off-line storage, or
- In-line or conduit storage.

#### 5.6. Concept Level Design Evaluation

- 5.6.1. For WWTF alternatives, develop concept-level designs including size, layouts, process flow diagrams, and life-cycle costs.
- 5.6.2. For CSO abatement alternatives, develop costs for a range of control levels per the EPA CSO Control Policy.

#### 5.7. Perform ranking evaluation of alternatives based on Task 5.1

- 5.7.1. Prepare for and present rankings review for both WWTFP and LTCP at one (1) public meeting. The presentation will include discussions regarding:
  - 5.7.1.1. Development of ranking system
  - 5.7.1.2. Development of evaluation criteria
  - 5.7.1.3. Presentation of findings of Task 5.6.

#### 5.8. Development of Recommended Alternative

- 5.8.1. Perform additional site-specific evaluations to confirm findings for recommended alternatives.
- 5.8.2. Pilot test recommended alternative(s), if warranted
- 5.8.3. Prepare Draft Recommendation Report
- 5.8.4. Submit Draft Recommendation Report to City for review
- 5.8.5. Review Recommendation Report with City
- 5.8.6. Finalize Recommendation Report and submit to EPA and NHDES
- 5.8.7. Meet with EPA and NHDES

#### 5.9. Develop TM to document alternative evaluation

- 5.9.1. Submit TM to City for comment
- 5.9.2. Meet with City to discuss TM
- 5.9.3. Revise TM as needed
- 5.10. Prepare for and present recommended alternative for WWTFP and LTCP at one (1) public meeting.

### Task 6. Develop Funding Strategies

The purpose of this task is to identify and assist the City in procuring funding for the WMP implementation.

- 6.1. Meet with the City and City's Advisory Consultant throughout the development of the WMP to identify potential funding sources.
- 6.2. Evaluate the debt retirement payments and long-term replacement/refurbishment costs and O&M costs for existing and proposed capital improvements and other proposed activities resulting from the WMP.
- 6.3. Compile and evaluate all current and proposed water and wastewater capital programs, replacement/refurbishment activities, and O&M activities that will affect current water and sewer rates.
- 6.4. Update water and sewer rate model based on proposed costs for implementing WMP over a range of implementation periods.
- 6.5. Perform an Affordability Analysis per EPA Guidelines and determine affordability.
- 6.6. Assist the City's Advisory Consultant and City with preparation of funding applications on behalf of the City, as appropriate.

### Task 7. Implementation Schedule

The purpose of this task is to the develop an implementation schedule for the capital projects and other recommended practices and activities identified in the draft WMP and based on the previously performed Affordability Analysis.

- 7.1. Develop a draft implementation schedule for the WMP.
- 7.2. Review draft schedule with City and City's Advisory Consultant.
- 7.3. Finalize draft implementation schedule
- 7.4. Submit draft implementation schedule to EPA and NHDES
- 7.5. Meet with EPA and NHDES to discuss draft implementation schedule and revise as necessary
- 7.6. Finalize implementation schedule and incorporate into final WMP.

### Task 8. Preparation of the WMP Document

### 8.1. The WMP will be comprised of a minimum of three (3) volumes:

- 8.1.1. Vol. 1 Main body will contain sections common to both the WWTFP Update and CSO LTCP Update
- 8.1.2. Vol. 2 WWTFP Update sections
- 8.1.3. Vol. 3 CSO LTCP sections

### 8.2. The preparation of the WWTFP and CSO LTCP Updates are outlined in Sections 9 and 10.

### Task 9. Wastewater Treatment Facilities Plan Update

The purpose of this task is to prepare the WWTP Update portion of the WMP.

- 9.1. From the previous tasks, compile and prepare the draft WWTFP Update.
- 9.2. Submit Draft Preliminary WWTFP Update to City for review
- 9.3. Meet with City to review Draft Preliminary WWTFP Update
- 9.4. Finalize Draft WWTFP Update based on City comments
- 9.5. Submit Draft Final WWTFP Update to EPA and NHDES
- 9.6. Meet with EPA and NHDES to discuss Draft Final WWTFP Update
- 9.7. Finalize Wastewater WWTFP Update
- 9.8. Present WWTFP Update to City Council
- 9.9. Submit Final WWTFP Update to EPA and NHDES
- 9.10.Coordinate and attend a Public Meeting to present the plan
- 9.11.Update website and issue newsletter

### Task 10. CSO LTCP Update

The purpose of this task is to prepare the CSO LTCP Update portion of the WMP.

10.1.From the previous tasks, compile and prepare the Draft Preliminary LTCP Update 10.2. Submit Draft Preliminary LTCP Plan update to City for review

10.3. Meet with City to review Draft Preliminary LTCP Plan update

10.4. Finalize Draft LTCP Plan based on City comments

10.5. Submit Draft Final LTCP Update to EPA and NHDES

10.6. Meet with EPA and NHDES to discuss Draft Final LTCP Update

10.7.Finalize LTCP Update

10.8.Present LTCP Update to City Council

10.9. Submit Final LTCP Update to EPA and NHDES

10.10.Coordinate and attend a Public Meeting to present the Final LTCP Update

### Task 11. Public and Regulatory Participation Program

The purpose of this task is to develop a public participation program to garner approval of the project from interested parties. The subtasks associated with this task will be ongoing throughout the project.

- 11.1. At the onset of this project the consultant working with the City will develop a public information website to disseminate information regarding the WMP to the general public. All information to be posted to the website will be pre-approved by the City of Portsmouth.
- 11.2. Prepare a press release for the City of Portsmouth to announce the WMP and inform citizens of the website. This press release may also include the regional communities identified in Task 1.1.
- 11.3. Prepare and present a "Wastewater 101" public meeting to begin the education process of work necessary to perform and complete the WMP. This presentation may be recorded for broadcast on the local access cable channel.

The specific sub-tasks associated with Task 11 will evolve as the project progresses. The actual Scope of Work to be performed under Task 11 will be based upon the City's needs and will be agreed upon prior to commencement of work associated with Task 11. Where specific Public and Regulatory Participation Tasks are known, they have been presented within the context of that main task (i.e. Task 5).

### Task 12. Project Management

The purpose of this task is to provide project management oversight and provide the required effort to coordinate the project with applicable regulatory agencies.

- 12.1. In addition to the typical project management duties of project coordination, invoicing, and project communication, the Planning Consultant shall also:
- 12.2. Prepare for and attend monthly update meetings with City and City's Advisory Consultant.
- 12.3. Submit quarterly and annual status reports to City, EPA and DES
- 12.4. Provide schedule updates to City, EPA and DES as warranted.

### **APPENDIX B.1**

Milestones and Schedules

1. The City shall implement the WMP, including construction of secondary treatment facilities, in accordance with Appendix B, and as follows:

a. By no later than October 1, 2009, the City shall submit to EPA and the NHDES for review and approval, in accordance with Task 4 of the WMP, a draft evaluation of the Sewer System to characterize its current performance in dry and wet weather and to project the impact of future flows on the System. By November 1, 2009, the City shall complete Task 4.

b. By no later than December 1, 2009, the City shall submit to EPA and the NHDES for review and approval, in accordance with Task 5 of the WMP, a draft evaluation of the full range of alternative processes, technologies, and practices for the Facility and Combined Sewer Overflow Facilities necessary to meet all applicable statutory and regulatory requirements. By no later than March 1, 2010, the City shall complete Task 5.

c. By no later than June 1, 2010, the City shall submit to EPA and the NHDES for review and approval, in accordance with Task 6 of the WMP, a draft report identifying and developing funding strategies necessary to complete all required Facility upgrades and improvements. By September 1, 2010, the City shall complete Task 6.

d. By no later than June 1, 2010, the City shall submit to EPA and the NHDES for review and approval, in accordance with Task 7 of the WMP, a proposed schedule for all Facility upgrades and improvements. By September 1, 2010, the City shall submit a final schedule for all Facility upgrades and improvements for incorporation into the Consent Decree, subject to the City's rights to dispute resolution under Section VIII. The proposed schedule shall include an implementation and completion schedule that is as expeditious as practicable consistent with sound engineering practice and normal construction practices.

e. By no later than June 1, 2010, the City shall submit to EPA and the NHDES for review and approval, in accordance with Task 9 of the WMP, a draft work plan for all upgrades and improvements to the WWTF, including construction of secondary treatment facilities ("WWTF Work Plan"). By September 1, 2010, the City shall submit a final WWTF Work, subject to the City's rights to dispute resolution under Section VIII. The proposed schedule shall include an implementation and completion schedule that is as expeditious as practicable consistent with sound engineering practice and normal construction practices.

a. By no later than June 1, 2010, the City shall submit to EPA and the NHDES for review and approval, in accordance with Task 10 of the WMP, proposed revisions to the LTCP necessary to bring the Combined Sewer Overflow Facilities into compliance with all applicable federal and state laws and regulations with respect to CSO Discharges from the Facility ("LTCP Update"). By September 1, 2010, the City shall submit a final LTCP Update, subject to the City's rights to dispute resolution under Section VIII. The proposed schedule shall include an implementation and completion schedule that is as expeditious as practicable consistent with sound engineering practice and normal construction practices.

### APPENDIX C

Interim Emissions/Effluent Limits

,

## INTERIM EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS for Outfall Serial Number 001

Effluent Characteristic	Discharge Limitations			Monitoring Requirements	
	Average Monthly	Average Weekly	Maximum Daily	Measurement Frequency	Sample Type
Flow	Report		Report	Continuous	Recorder
Biochemical Oxygen Demand <sub>5</sub> ("BOD <sub>5</sub> ") mg/l (lbs/day)	150(6005)	Report	Report	2/week	24-Hour Composite
Total Suspended Solids ("TSS") mg/l (lbs/day)	95(3803)	Report	Report	2/week	24-hour composite
BOD <sub>5</sub> Minimum Percent Removal	30			1/Month	Calculated
TSS Minimum Percent Removal	30			1/Month	Calculated
Total Residual Chlorine <sup>a</sup>	See Permit		See Permit	2/Day	Grab
Chlorine Usage <sup>a</sup>			-+	Continuous	SCADA System
Whole Effluent Toxicity <sup>b</sup> , LC50, % effluent			Report	1/Year	24-Hour Composite
(WET Sample) Ammonia as Nitrogen, Total Recoverable Al, Cd, Cu, Pb, Ni, Zn		-	Report	1/Year	24-Hour Composite

Footnote<sup>a</sup>: Use the SCADA system to monitor the fluid level of the bulk chlorine storage tank and maintain a bound logbook with complete records of chemical use, chemical feed pumps activity, any alarms for chemical feed pump failure and leakage, chlorination system maintenance and repair, and SCADA system maintenance.

Footnote<sup>b</sup>: Beginning in 2008, the tests shall be performed during the July-September calendar quarter using *Menidia beryllina* and *Mysidopsis bahia* with results postmarked by October 15<sup>th</sup>.