UNITED STATES DISTRICT COURT

for the

DISTRICT OF MASSACHUSETTS

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UNITED STATES OF AMERICA, .

Plaintiff,

CIVIL ACTION

v. . No. 85-0489-MA

METROPOLITAN DISTRICT COMMISSION, .

et al.,

Defendants

. . . . . .

CONSERVATION LAW FOUNDATION OF

NEW ENGLAND, INC., .

Plaintiff,

CIVIL ACTION

v. No. 83-1614-MA

METROPOLITAN DISTRICT COMMISSION, .

Defendants

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MWRA QUARTERLY COMPLIANCE AND

PROGRESS REPORT AS OF JUNE 16, 2003

The Massachusetts Water Resources Authority (the "Authority") submits the following quarterly compliance report for the period from March 15, 2003 to June 16, 2003, and supplementary compliance information in accordance with the Court's order of December 23, 1985, and subsequent orders of the Court.

I. Schedule Six.

A status report for the scheduled activities for the months of March 2003 and April 2003 on the Court's Schedule Six, certified by Frederick A. Laskey, Executive Director of the Authority, is attached hereto as Exhibit "A"

A. Activities Not Completed.

1. Complete Construction of CSO Relocation to Reserved Channel and Associated Treatment Facility and Commence Construction of Consolidation Facilities for BOS 076-080.

As anticipated, the Authority was unable to meet the milestones for the completion of construction of the combined sewer overflow CSO") relocation to Reserved Channel and associated treatment facility and for the commencement of construction of the consolidation facilities for BOS 076-080 facility. The Authority was unable to complete these milestones due to its inability to obtain the Article 97 legislation necessary to acquire Site "J" as a result of local opposition. Because no other site that would allow the project to move forward was available, the Authority filed a Notice of Project Change NPC") in accordance with the Massachusetts Environmental Policy Act MEPA") in an effort to reach consensus on a plan for CSO control in South Boston.1 On June 8, 2001, the Secretary of Environmental Affairs issued a certificate (the "Certificate") on the NPC.2 The Certificate required the Authority to include all CSO control alternatives considered during the development of the 1997 Final CSO Facilities Plan/Environmental Impact Report Final FP/EIR"), including those dismissed in the planning process or in that document. The Certificate also required that the reassessment be responsive to the public comments that had been submitted.

To that end, the Authority planned to accomplish the reassessment in two phases. In Phase I, it would update the water quality and sewer system baseline conditions, initiate the public participation program and identify CSO control options for detailed evaluation.3 It would conduct the detailed evaluation of alternatives with the goal of selecting a recommended CSO control plan for South Boston in Phase II.4

The Authority completed Phase I in January of this year with the exception of the water quality sampling due to the absence of storm events large enough to cause sustained activations. The water quality sampling will be completed as part of Phase II. The Authority is now in Phase II and is focusing its efforts on further technical evaluations on the feasibility, performance and cost of the remaining CSO control alternatives. As part of Phase II, the Authority variously met with the Environmental Protection Agency (" EPA"), the Department of Environmental Protection ("DEP";), South Boston residents and elected officials, the Science Advisory Committee, and the Authority's Wastewater Advisory Committee to discuss the status of the review of the CSO control alternatives and siting evaluations. In an effort to develop a plan that is acceptable to all parties, the Authority proposed the possibility of developing a modular implementation approach to CSO control in South Boston that would allow the Authority to implement a high level of CSO control in the near term, while conducting a water quality monitoring program to examine the incremental performance of the system and the resulting receiving water quality benefits. Additional measures, identified as later modules of the plan, could then supplement the level of control up to CSO elimination. The modular approach would include different variations of the options recommended in Phase I. Based on its initial discussions with the parties, the Authority is moving

forward with its investigation of a modular approach that will allow for significant CSO control in the near future.

Over the next quarter, the Authority will continue to meet with interested parties to discuss progress and seek input. The Authority anticipates that it will be able to complete Phase II and submit the Supplemental Environmental Impact Report, including a new recommended plan for CSO control, by March 2004.

B. Activities Completed.

1. Commence Construction of Detention and Treatment Facility at Union Park.

In accordance with Schedule Six, the Authority issued a Notice To Proceed with construction of the Union Park detention and treatment facility on March 31, 2003. The Union Park detention and treatment facility is intended to improve the water quality in the Fort Point Channel by providing treatment to CSO flows that are discharged through Boston Water and Sewer Commission's ("BWSC's") Union Park Pump Station.

It should be noted, however, that while the contractor commenced construction activities, the Authority is in the process of resolving a bid protest regarding the electrical filed sub-bid, which has delayed the award of the electrical subcontract for this project. The Authority is currently assessing the impacts, if any, to the schedule for completion of construction and will report further next quarter.

In addition, on May 21, 2003, the Authority filed a motion with the Court to amend Schedule Six to defer the milestone for the completion of construction of the Union Park detention and treatment facility from March 2005 to September 2005 and to add a reference to footnote 35 in Schedule Six.5 The Court allowed the motion on May 28, 2003.

2. Commence Construction of Interceptor Relief for BOS 003-014.

On March 31, 2003, the Authority issued a Notice To Proceed with the construction of the first contract for the East Boston Branch Sewer Relief project in accordance with Schedule Six. This contract involves relining the main trunk sections of the Authority's East Boston branch sewer to improve hydraulic conditions and provide long-term structural integrity.

As previously reported, the Authority temporarily suspended the final design work associated with the remaining two construction contracts that were proposed as part of this project pending a reevaluation of the costs and benefits of engineering options for completing the project due to an error in the initial engineering analysis that overestimated the reduction in CSO associated with the recommended plan.6 Since that time, the Authority has been working with BWSC and others to gain a better understanding of the hydraulic benefits of sewer separation projects, especially in light of the new development planned in this area.

The Authority expects to propose the incorporation of the additional services for the reassessment into its design contract for this project to its Board of Directors at its June 25 meeting and expects to commence the reassessment upon Board approval. The Authority anticipates that it will be able to complete the reassessment and file a NPC with MEPA, if necessary, by the end of this year. Once a plan is chosen, the Authority will propose a new schedule for the completion of this project.

3. Report on Backup Disposal Plan.

On April 15, 2003, the Authority submitted its report on actions taken pursuant to its backup residuals disposal plan over the past six months in compliance with Schedule Six. In addition, the Authority and the Commonwealth filed their Joint Report on the implementation of the Memorandum of Understanding regarding the beneficial use of biosolids.

C. Progress Report.

1. Combined Sewer Overflow Program.

(a) Cambridge Sewer Separation.

The Authority and the City of Cambridge have completed their efforts in preparing, reviewing and producing a Response to Comments ("RTC";) to address issues and questions raised in public and regulatory comments on the Notice of Project Change filed on April 30, 2001. The Authority and the City of Cambridge submitted the RTC to MEPA on May 30, 2003. MEPA noticed the document in the Environmental Monitor on June 10, 2003, commencing a public comment period.

Efforts also continued on the preparation of the final Variance report for the Alewife Brook/Upper Mystic River. The report will present the results of the reassessment of the recommended Alewife Brook/Upper Mystic River CSO control plan (as presented in the RTC) compared with other alternatives that provide higher levels of CSO control up to and including elimination. As required by the Variance, the reassessment includes 1) an analysis of the CSO, stormwater and upstream pollution loads of each of the alternatives; 2) results of the predictive modeling performed to estimate the water quality benefits of each of the CSO control alternatives; 3) measures to be taken to minimize CSOs and mitigate impacts of any CSO discharges that will not be eliminated; and 4) the estimated costs of each of the alternatives. The report will also include a cost-to-benefit evaluation and a description of the financial impact of the final recommended CSO control plan on the Authority's ratepayers. The Authority expects to submit this report to DEP by July 1, 2003.

In addition, on April 22, 2003, Authority staff participated in a public presentation on flooding issues, with the *tri-community working group*, which includes representation from the City of Cambridge and the Towns of Arlington and Belmont, to discuss relationships between sewer overflows and flooding along the Alewife Brook.

(b) Charles River Variance.

As previously reported, DEP issued a one-year extension to the Variance, from October 1, 2002 to October 1, 2003.7 The extension was issued, in part, due to a delay in receiving the necessary information from the United States Geological Survey on pollutant loadings and to allow the Authority additional time to collect water quality data at the upgraded Cottage Farm CSO facility, following completion of the start-up and optimization period, to assess the performance of the facility and to reevaluate the receiving water impacts of receiving water sampling program on April 1, after start-up of the recently upgraded facility was complete and the prolonged 2003 winter conditions, including ice-cover, had sufficiently abated. To date, weather conditions and the system's response to these conditions has only provided the Authority the opportunity to sample one of the minimum of four needed to prepare the facility performance evaluation report.

In addition, the Authority is in the process of transition to a new hydraulic model for its collection system, which should be a more sophisticated and reliable tool. The Authority is calibrating the new model and expects to be able to use it to complete the Cottage Farm evaluations. Use of the new model will enable the Authority to evaluate the benefits of real-time controls and other system optimization measures to lower activations at Cottage Farm, which is not possible with the existing model. This information is necessary to have to update the baseline estimate and properly evaluate the cost and benefits of higher levels of CSO control with additional storage at the facility.

As a result of these ongoing efforts, the Authority notified EPA and DEP in April that it would be unable to complete all aspects of the required evaluations for the Final Variance Report by the July 1, 2003, deadline. The Authority proposed either to submit the report in sections from July through September or to submit the full document in September. DEP indicated that it preferred that the Authority submit the full document in September and requested that the Authority notice the delay in the Environmental Monitor. The Authority plans to submit such notice to MEPA.

The Authority maintains its readiness to collect water quality samples at the Cottage Farm facility and in the Charles River during the next significant facility activation. It also continues to make the necessary progress to

complete the new hydraulic model and evaluate system optimization measures in time to include the results of this work in the September 1 report.

(c) Storage and Consolidation Conduit for BOS 072-073.

As previously reported, the Authority commenced the design contract for the Fort Point Channel storage conduit in July 2002, in compliance with Schedule Six. In the preliminary design phase, the design contractor updated baseline flow conditions and reassessed the cost and performance of the storage conduit. The reassessment was motivated by new information on improved system performance, a potential for changes in system flows due to planned development and higher soft-ground tunneling costs and risks. What was modeled in the 1997 plan as a 144 acre combined sewer area tributary to CSO outfalls BOS 072 and BOS 073 is now estimated to be only 55 acres, with sewer separation work now underway or planned as part of the Convention Center and other development projects. Given the large reduction in the combined sewer area tributary to outfalls BOS 072 and BOS 073, sewer separation was also reexamined.

The reassessment indicated that the estimated storage volume necessary to meet CSO control goals at outfalls BOS 072 and BOS 073 was significantly reduced. The reassessment also indicated that sewer separation projects related to development and other planned changes in land use will affect the hydraulic performance of the wastewater system in the Fort Point Channel project area. The estimate of the current annual CSO activations and volume are seven and 3.0 million gallons in a typical rainfall year, significantly less than the 15 activations and 7.2 million gallons predicted in the 1997 plan.

As a result of these preliminary design findings, on June 11, 2003, the Authority's Board of Directors approved staff's recommendation to file with MEPA an NPC recommending that the storage conduit be replaced with a plan for sewer separation and system optimization. The NPC states that sewer separation in the BOS 073 tributary area, along with optimization at the BOS 072 outfall, would meet the 1997 CSO Final FP/EIR goals for this project and result in less CSO volume to the Fort Point Channel than expected under the 1997 plan. The NPC also demonstrates that, although the previously recommended plan would result in a permanent impact to the neighborhood in the form of an above-ground CSO facility, the revised plan will have only temporary construction impacts over a shorter construction duration, with no permanent above-ground structures.

The revised plan will reduce the annual activation frequencies at outfalls BOS 072 and BOS 073 to two per year at each outfall as originally proposed. The revised plan will also reduce the annual combined CSO volume at these two outfalls from the 1.4 million gallons envisioned in the original plan recommended in 1997 to 0.4 million gallons.

The Authority plans to file the NPC for publication in the June 24 Environmental Monitor. It also plans to hold a public meeting with interested parties on July 8, 2003, in order to receive further comments on the revised CSO control plan. The Authority will report on progress made during the MEPA public comment period in the next quarterly report.

(d) Storage Conduit for BOS 019.

The Authority recently discovered a serious obstruction and considerable damage to its Charlestown Branch Sewer caused by a pile that was driven through the sewer when it was installed as part of the Central Artery/Third Harbor Tunnel CA/T") project. The Authority believes the obstruction and damage may be significantly restricting flow during wet weather, causing backwater effects contributing to higher CSO discharges at BOS 019. The pile will continue to be a hydraulic restriction within this sewer until it is removed and the pipe is repaired.

The Authority is taking steps to try to mitigate the hydraulic impacts in the short-term, including removing substantial sediment buildup immediately upstream of the obstruction. Repair and cost recovery meetings with CA/T are ongoing, and it is not anticipated that this repair will delay the completion of this project. The Authority will report further next quarter.

In the meantime, the Authority has completed a preliminary design reassessment of the storage project for cost and benefit which has confirmed the appropriateness and cost effectiveness of the proposed storage conduit.

(e) Quarterly CSO Progress Report.

Pursuant to Schedule Six, the Authority submits as **Exhibit "B"** its Quarterly CSO Progress Report (the "Report"). The Report summarizes progress made in the design and construction of the CSO projects during the past quarter and identifies issues that have affected or may affect compliance with Schedule Six. The Report also notes the status of certain planning and regulatory efforts.

By its attorneys,

John M. Stevens (BBO No. 480140)

Dated: June 16, 2003

Notes:

1. See Compliance and Progress Reports for March 15, 2001, pp. 6-9; and July 17, 2000, pp. 11-12.

2. See Compliance and Progress Report for September 17, 2001, p. 5.

3. See Compliance and Progress Report for December 17, 2001, pp. 4-6.

4. See Compliance and Progress Report for March 15, 2002, pp. 2-4.

5. Footnote 35 of Schedule Six allows for a period of start-up and systems optimization after completion of construction consisting of five activations of at least four hours duration each in which to achieve effective treatment of flows, as defined by the NPDES permit.

6 See Special Report of the MWRA Concerning Construction of Interceptor Relief for BOS 003-014 dated April 26, 2002, p. 4 and Compliance and Progress Report for December 16, 2002, pp. 14-15.