UNITED STATES DISTRICT COURT for the DISTRICT OF MASSACHUSETTS

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UNITED STATES OF AMERICA,	
Plaintiff,	
V.	. CIVIL ACTION . No. 85-0489-MA
METROPOLITAN DISTRICT COMISSION, et al.,	· .
Defendants.	
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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 SEPTEMBER 15, 2004

The Massachusetts Water Resources Authority (the "Authority") submits the following quarterly compliance report for the period from June 15, 2004 to September 15, 2004, and supplementary compliance information in accordance with the Court's Order of December 23, 1985, and subsequent orders of the Court.

I. Schedule Six.

There were no scheduled activities for the last quarter on the Court's Schedule Six.

A. Progress Report.

- 1. Combined Sewer Overflow Program.
 - (a) North Dorchester Bay and Reserved Channel Consolidation Conduits and CSO Facility.

As reported last quarter, the Authority submitted the Supplemental Facilities Plan and Environmental Impact Report ("SFP/EIR") for the recommended long-term combined sewer overflow ("CSO") control plan for North Dorchester Bay and Reserved Channel to the Massachusetts Environmental Policy Act ("MEPA") Office of the Executive Office of Environmental Affairs on April 27, 2004. In response to the Conservation Law Foundation's ("CLF") and the United States Environmental Protection Agency's ("EPA") comments regarding the portion of the plan that relates to the Morrissey Boulevard storm drain, the Authority submitted a supplemental report to the MEPA Office on June 23, 2004. The report verified the technical feasibility of redirecting stormwater flows from the North Dorchester Bay area (from existing outfall BOS087) to Savin Hill Cove in storms greater than a one-year, 24-hour storm for the purpose of increasing the level of stormwater control to the South Boston beaches (to a fiveyear level of control). In storms smaller than the one-year, 24-hour storm, stormwater flows will be directed to the North Dorchester Bay storage tunnel and be pumped after each storm to the interceptor system for treatment at Deer Island. The Authority also held a second public meeting in Dorchester on June 28 to review and answer questions about the recommended CSO control

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See Compliance and Progress Report for June 15, 2004, pp. 2-6.

plan for North Dorchester Bay and Reserved Channel, including the Morrissey Boulevard drain component presented in the SFP/EIR.

On July 16, the Secretary of Environmental Affairs issued a Certificate indicating that "the project has generally avoided and mitigated environmental impacts to the greatest feasible extent..." and that the project itself is mitigation for water quality impacts. A copy of the Secretary's Certificate is attached as Exhibit "A." The Secretary determined that the report "adequately and properly complies" with the MEPA policies and regulations and that "the project may now proceed to the final design and permitting stage." The Secretary's Certificate also identified several remaining issues of concern and the need for additional information to be developed during the permitting processes. Most of the issues identified are related to Boston Water and Sewer Commission's ("BWSC") Morrissey Boulevard drain.

The Certificate indicated that the Authority should file a Section 61 Finding with the MEPA office describing the Authority's general approach for meeting the requirements of the Certificate relative to impacts to Savin Hill Cove and South Dorchester Bay and for monitoring the water quality of North Dorchester Bay and the Reserved Channel as the plan is implemented. The Authority plans to work with BWSC to develop the Section 61 Finding for submission to MEPA, as BWSC undertakes design efforts for the Morrissey Boulevard Drain.

With respect to the project schedule, the Authority recognizes the concerns raised by the Secretary, CLF and others that, under the project schedule proposed by the Authority in the SFP/EIR, the water quality benefits of the recommended plan would not be realized until 2011. In response, the Authority has taken certain steps to attempt to shorten the schedule.

At the June 23 Board of Directors meeting, Authority staff proposed an approach for expediting delivery of the engineering services necessary to design and manage the construction

of the North Dorchester Bay storage tunnel and associated facilities that are intended to achieve a 25-year level of CSO control and five-year level of stormwater control along the South Boston beaches. The approach, which is now being implemented, includes expediting design efforts for the 17-foot diameter storage tunnel by amending the existing design contract, avoiding the several months it would take to create a new contract and procure services. On August 11, the Authority's Board of Directors approved an amendment to the contract, and the new design services commenced on September 1, 2004.

The design contract schedule has the objectives of awarding the tunnel construction contract in the spring of 2006, approximately one year earlier than proposed in the SFP/EIR. This schedule has the benefit of taking advantage of most of the 2006 construction season. The same schedule calls for an earlier commencement of construction of the Pleasure Bay stormwater relocation improvements, with completion of this construction as early as May 2006. The Authority expects to issue a Notice to Proceed on the facilities design contract by May 2007, with the construction of these facilities commencing either after the tunnel is mined and the main shaft work area at Conley Terminal is available or late in the mining process if the tunnel shaft area can be shared with the facilities construction contractor.

This approach may allow the Authority to pursue a shorter implementation schedule than proposed in the SFP/EIR for the North Dorchester Bay storage tunnel and associated facilities. The Authority is also developing plans for completing work necessary to support the permitting process and the process for legislative approval under Article 97, but recognizes that the interests of the regulatory authorities, the Massachusetts State Legislature and the public may affect the schedule of those activities. The Authority plans to meet with EPA, the United States

Department of Justice, and the Massachusetts Department of Environmental Protection ("DEP") to discuss the construction schedule.

(b) <u>Union Park Detention and Treatment Facility.</u>

As of the end of August 2004, the contractor had completed 43 percent of the construction work for the Union Park detention and treatment facility. During the past quarter, the contractor continued to work on the construction of the large, below-grade detention basins, including excavation, installation of concrete forms, placement of reinforcing steel and pouring of concrete base slab sections and wall sections. To date, 80 percent (56,000 tons) of the soil to be removed has been excavated and taken off site, while 45 percent (6,000 cubic yards) of the specified concrete has been poured. The contractor also installed 16 of the 21 rock anchors through the new concrete base slab.

In the existing BWSC pump station building, the contractor completed the demolition and reconstruction in the wet well area necessary for installation of new electric pumps five and six, including pouring the new wet well roof beams and intermediate pump room floor slab. The contractor also completed excavation to place the footing for the new fourth turbine exhaust stack and constructed related vertical concrete walls.

Upcoming work includes continuing construction of the detention basins, erecting the fourth turbine stack, installing the primary and secondary duct banks, continuing structural modifications and process piping for pumps five and six, waterproofing the inlet chamber, commencing replacement of the lower roof and commencing work to install a sluice gate in an existing manhole in Albany Street.

As reported last quarter, the Authority noted that it was planning to extend the term of the construction contract by 102 days because of the delay associated with the site remediation of the

abandoned 1914 pump station.² In addition to this delay, the contractor lost seven more days due to the suspension of work during the week of the Democratic National Convention. With these two delays, the Authority now anticipates that the contract completion date will be extended from September 29, 2005 to January 16, 2006. Moreover, the contractor recently indicated that it was experiencing additional delays. The Authority will report further next quarter.

(c) Cambridge Sewer Separation.

The City of Cambridge continues with the design of contract 12, the contract involving a new storm drain outfall and related storm water wetland detention basin that will convey and attenuate the storm water flows that will be generated from the sewer separation work recommended in upland neighborhoods. Design of contract 12 is approximately 75 percent complete. Cambridge received an Order of Conditions from the Cambridge Conservation Commission on June 16, 2004, for the contract 12 construction work. However, a group of citizens filed an appeal seeking a Superseding Order of Conditions from DEP.

Cambridge also continues to update the supplemental preliminary design report for the revised Alewife Brook sewer separation plan and expects to submit the second supplemental preliminary design report soon. This report will define the needed sewer system improvements to accomplish the level of sewer separation and CSO control recommend in the revised CSO control plan. Cambridge informed the Authority that it expects the \$74 million cost estimate to increase.

With respect to floatables control, Cambridge suspended its design work pending the completion of the second supplemental preliminary design report. As previously reported, Cambridge encountered site-specific problems at each outfall location, primarily due to existing

See Compliance and Progress Report for June 15, 2004, pp. 6-7, and Compliance and

structural deficiencies discovered early in design, which delayed the implementation of floatables control.³ Cambridge completed construction of floatables control at outfall CAM401A but does not expect to complete construction at all locations until December 2006.

(d) Alewife Brook/Upper Mystic River Basin Variances.

On September 1, 2004, DEP issued a three-year extension to the Alewife Brook/Upper Mystic River Basin variance from September 1, 2004 to September 1, 2007. DEP granted the variance extension based on its findings, as supported by the technical and cost information in the Authority's 1997 Final Facilities Plan and Environmental Impact Report ("1997 Facilities Plan/EIR"), July 1, 2003 Final Variance Report, and supplemental affordability analyses demonstrating that implementation of more stringent CSO controls at this time would result in substantial and widespread economic impact as specified in 314 C.M.R. 4.03(4). In its determination, DEP noted that a feasible means to eliminate CSO discharges to the Alewife Brook/Upper Mystic River Basin had not been identified and that a B(cso) designation for the impacted segment may be warranted.

The variance conditions require the Authority and the City of Cambridge to implement the revised recommended CSO control plan for the Alewife Brook/Upper Mystic River Basin at a cost of \$74 million in place of the \$13.8 million CSO control plan recommended in the 1997 Facilities Plan/EIR. The conditions also require the Authority to continue to perform its water quality monitoring program and the cities of Cambridge and Somerville to perform infrastructure investigations to determine if they can further reduce CSO discharges through hydraulic relief, sewer separation or other collection system controls. In addition, the Authority is required to

Progress Report for March 15, 2004, pp. 5-6.

See Compliance and Progress Report for June 15, 2004, pp. 7-8.

review the cities' assessment reports to determine if there are any feasible, cost effective CSO control optimization measures that benefit water quality in the Alewife Brook/Upper Mystic River watershed which can supplement the Authority's current recommended plan.

(e) Construction of Storage Conduit for BOS 019

The Authority received the 100-percent design submission on July 30, 2004. Included in this submission were an updated construction cost estimate and a revised construction schedule. The updated cost estimate, \$7.2 million, is significantly greater than the \$2.3 million estimate in the 1997 Final CSO Facilities Plan and Environmental Impact Report. The increase is primarily due to the need for a larger storage conduit (from 410,000 gallons to 670,000 gallons) to meet the 1997 CSO control goals, new security and safety requirements, greater hazardous materials handling costs, special excavation support measures to protect Tobin Bridge footings and the addition of instrumentation and controls to automate operation of the storage conduit.

The construction schedule was reevaluated with careful consideration of the same issues that have driven the cost up, and it was determined based on 100-percent design that the construction schedule would need to be extended. The Authority continues to plan advertising the construction contract in November 2004 and commencing construction by March 2005 in compliance with Schedule Six. However, the estimated construction duration has increased from the 18-month estimate based on the plan as recommended in the 1997 Facilities Plan to 24 months based on the 100 percent design submission. This longer schedule would push out the estimated construction completion date to March 31, 2007, six months later than the corresponding milestone in Schedule Six. The Authority plans to propose the longer construction schedule and revised milestone to the court parties soon.

(f) Quarterly CSO Progress Report.

In accordance with Schedule Six, the Authority submits as Exhibit "B" its Quarterly CSO Progress Report (the "Report"). The Report summarizes progress made in design and construction on the CSO projects during the past quarter and identifies issues that affect or may affect compliance with Schedule Six.

By its attorneys,

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Certificate of Service

I, John M. Stevens, attorney for the Massachusetts Water Resources Authority, do hereby certify that I have caused this document to be served by hand or mail to all counsel of record.

John M. Stevens (BBO No. 480140)

Dated: September 15, 2004