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.

P>. . . . . .

CONSERVATION LAW FOUNDATION OF .

NEW ENGLAND, INC., .

Plaintiff, .

. CIVIL ACTION

v. . No. 83-1614-MA

METROPOLITAN DISTRICT COMMISSION, .

Defendants. . . . . .

MWRA QUARTERLY COMPLIANCE AND

PROGRESS REPORT AS OF JUNE 13, 2002

The Massachusetts Water Resources Authority (the "Authority") submits the following quarterly compliance report for the period from March 15, 2002 to June 13, 2002, 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 month of April 2002 on the Court's Schedule Six, certified by Frederick A. Laskey, Executive Director of the Authority, is attached hereto as Exhibit "A."

A. Activities Completed.

1. Report on Backup Disposal Plan.

On April 8, 2002, 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.

B. Progress Report.

1. Combined Sewer Overflow Program.

(a) North Dorchester Bay and Reserved Channel Consolidation Conduits and CSO Facility.

During the past quarter, the Authority continued to make progress toward completing Phase I of its reassessment of combined sewer overflow ("CSO") control alternatives for South Boston.[1] On April 25, May 2 and May 13, 2002, the Authority conducted water quality sampling for the three remaining storm events necessary to complete the originally scoped wet weather sampling program. Although these events provided useful information regarding stormwater loadings, the Authority was not able to collect sufficient CSO data to calibrate the receiving water model. In that regard, the April 25 and May 2 events did not cause CSO activations, and the severe storm conditions on May 13 made it unsafe for the boat to collect receiving water samples in North Dorchester Bay. As a result, additional wet weather sampling is necessary. The Authority still anticipates that it will be able to complete Phase I of the reassessment in the fall of 2002. However, only when the baseline water quality update is complete will the Authority be able to assess the water quality impacts of each CSO control alternative.

In addition, the Authority met with the United States Department of Justice (" DOJ"), the United States Environmental Protection Agency (" EPA"), and the Massachusetts Department of Environmental Protection ("DEP") on April 1, 2002, to discuss the range of alternatives and levels of control under consideration and the current reassessment schedule. The Authority also held a public meeting on April 9, 2002, to update the public on the status of the preliminary alternatives evaluation and to describe further the key concepts of level of CSO control and water quality benefit.

The Authority also made considerable progress on the alternatives evaluation during an internal workshop with its consultant on May 23, 2002 at which participants tentatively identified the most promising control technologies at various levels of CSO and stormwater control. In particular, the workshop focused on potential phasing of short and long-term measures, as well as the relationships among cost, level of control and water quality benefit community impacts and general implementability. The Authority will provide an update on the evaluation to its Board of Directors at its June 26, 2002 meeting.

The Authority plans to hold another public meeting on June 27, 2002 to present the latest water quality sampling results and, more importantly, to discuss with the public and elected officials the CSO control options to be carried forward for further analysis. The Authority also plans to meet with DOJ, EPA and DEP in July to update them on alternatives evaluation progress and baseline water quality information.

(b) Cambridge Sewer Separation.

The Authority and the City of Cambridge (the "City") continue to work on preparing responses to issues and questions raised in public comments on the Notice of Project Change ("NPC")[2] A considerable number of these comments related to the potential for increased stormwater discharges to exacerbate existing flooding along the Alewife Brook and the impacts to the Alewife Brook Reservation from the proposed wetland detention basin. The City has been conducting additional hydraulic modeling work regarding pre- and post-project stormwater flows to the Alewife Brook in order to respond adequately to these concerns.

On March 30, 2002, the City and the Authority held a technical workshop for interested parties to discuss construction and calibration of the model. Invited participants included technical representatives from DEP, the Department of Environmental Management, the Arlington and Cambridge Conservation Commissions, the Towns of Arlington and Belmont, and advocacy groups. Since that time, the City has proceeded with model runs incorporating proposed project conditions to assess hydraulic scenarios and evaluate implications for detention basin design. Preliminary model results indicate that, by reducing the size of the proposed stormwater outfall and modifying the detention basin design, the City would be able to implement the project without worsening existing flood conditions along the Alewife Brook. However, decreasing the size of the stormwater outfall would also result in less than optimal drainage service in the largely residential tributary area of Cambridge. The Authority and the City will present the results of the model runs and discuss preliminary concepts for modifying the wetland detention basin design to interested parties at a follow-up technical workshop scheduled for June 13.

Efforts also proceeded in preparing responses to public comments related to other issues, particularly those associated with the proposed level of CSO control. At this time, the Authority and the City anticipate that, because preparation of the Response to Comments required significant additional technical evaluation as well as interagency and public coordination, they will not be able to meet the September 2002 MEPA submittal date previously reported and will need as many as three additional months to complete and file the document.[3]

In addition, the City and the Authority met with the Metropolitan District Commission (the "MDC") on March 21 and May 15, 2002 to coordinate modifications to the design of the proposed wetland detention basin to comport with the ecological restoration objectives of MDC's Alewife Reservation Master Plan. The Authority and the City also met with EPA, DOJ and DEP on March 26, 2002 to address the possibility of completing portions of the project on an accelerated schedule and to provide an update on the status of other activities. Specifically, the Authority discussed the possibility of expediting sewer separation for outfall CAM 400, floatables control for remaining Alewife outfalls and interceptor connection relief for outfalls SOM 001A, CAM 002, and CAM 401B. The Authority and the City plan to meet with EPA, DOJ and DEP in July to follow-up on these issues.

In the meantime, the City is continuing with the construction of contract 2B (Fresh Pond Parkway sewer separation) and is still on schedule to complete this contract next month. With the completion of this contract, the City will have completed four contracts, thereby reducing annual CSO activations and volume from 63 activations and 50 million gallons to 25 activations and 33 million gallons. As previously noted, the Authority does not expect any additional construction contracts to commence until the summer of 2003, after it and the City have complied with the MEPA requirements set forth in the Secretary's Certificate.

With respect to the variance for CSO discharges to the Alewife Brook/Upper Mystic River Basin, DEP issued its Final Determination for an extension on May 8, 2002, formally extending the variance from March 5, 2002 to September 5, 2003.[4] DEP incorporated into the extension several conditions with which the Authority and the Cities of Cambridge and Somerville must comply. These conditions are related to enhanced public notification of CSO impacts to the receiving water, estimating CSO activations, the existing stormwater sampling program and a new CSO sampling requirement.

(c) Interceptor Relief for BOS 003-014.

As reported in its April 26, 2002 Special Report Concerning Construction of Interceptor Relief for BOS 003-014 (East Boston Branch Sewer Relief), the Authority will not be able to meet the milestone for the completion of construction of this project by September 2005 in accordance with Schedule Six.[5] However, the Authority expects to be able to commence construction of a portion of this project by March 2003 in accordance with Schedule Six.

As noted in the Special Report, the Authority was in the process of performing a full reevaluation of the East Boston Branch Sewer Relief project (the "Project") in light of new information indicating that the cost estimates for the project had significantly increased and that the levels of CSO activations and discharge volume set for in the Authority's Final FP/EIR would not be achieved under the recommended plan. The Authority expects that the reevaluation will focus on the cost and benefits of various levels of CSO control provided by combinations of hydraulic relief and sewer separation. The Authority estimates that the reevaluation will take several months to complete and will delay the construction completion date beyond the September 2005 milestone. Currently, the Authority is in the process of scoping the reevaluation work and expects to submit a detailed schedule to EPA, DOJ and DEP later this month.

(d) Charles River Variance.

On May 20, 2002, the Authority met with EPA and DEP to discuss the status of the July 2002 Authority submittals required by the Charles River variance. At the meeting, the Authority discussed delays in several ongoing work efforts that would make it impossible to make the July 2002 submittals in accordance with the variance requirements. The Authority indicated that it did not receive a report prepared by USGS that assesses the effectiveness of Best Management Practices until May 2002, three months after it was due. This report will be the basis for developing the different modeling scenarios for the July 2002 submittals. The Authority also indicated that it was unable to complete the start-up phase[6] at the Cottage Farm CSO facility due to the drier than normal weather in the fall of 2001 and early spring of 2002. Because the Authority has not yet achieved a long-term, optimized operational condition at the Cottage Farm facility, it cannot complete the water quality sampling program necessary to assess treatment performance in the July 2002 submittals. To date, the Authority has completed three of the five start-up events at the Cottage Farm facility and anticipates that it will complete the remaining two events this summer or early in the fall. Beyond start-up testing, the Authority is planning to sample six wet weather events for the purpose of assessing performance of the facility. Because it generally takes an inch of rain to activate the facility for the minimum two-hour period required for sampling, it is unlikely that the Authority will be able to sample all six events prior to October 1, 2002.

The Authority also noted that it had recently discovered new information indicating that a weir in the South Charles Relief Sewer is set one foot lower than in the model used for facilities planning, that flows that were previously thought to be separated in Brookline have been determined to be combined and that both these conditions may affect the annual volume and activations predicted for the Cottage Farm CSO facility in the Authority's 1997 Final CSO Facilities Plan and Environmental Impact Report (" Final FP/EIR"). As a result, the Authority noted that it would need additional time to conduct further investigations. Ongoing investigations include consideration of the diversion of certain flows, the raising of overflow weir elevations, revised operation of in-line gates and other measures to minimize CSO discharges at Cottage Farm.

Based on the need to complete the required water quality sampling program and to understand fully the impacts of the new information on flows tributary to Cottage Farm, the Authority now expects to request both a deferral of the submittal date for the July report and an extension to the overall variance period which expires on October 1, 2002. The Authority is currently reviewing this data in more detail and expects to submit a letter to DEP later this month requesting an extension to the Charles River Variance and indicating the length of time necessary to complete the required tasks.

(e) Upgrades to CSO Facilities.

The Authority completed the acceptance-testing phase for the Prison Point, Fox Point, Commercial Point, and Somerville Marginal CSO facilities and commenced the start-up period at all of these facilities.[7]

(f) Dorchester Brook Conduit In-line Storage.

On July 31, 2001, the Authority filed a motion to amend Schedule Six by deleting the milestones relating to design and construction of the Dorchester Brook Conduit in-line storage project, and the Court allowed the motion on August 8, 2001.[8] In that motion, the Authority noted that it could reduce the annual activation frequency and volume of CSO discharges to only three activations per year (the Final FP/EIR predicted four per year) by implementing a System Optimization Project ("SOP") raising the elevation of a weir at CSO regulator RE-070/10-5. At that time, the Authority thought that it would be able to implement that SOP in conjunction with Boston Water and Sewer Commission (" BWSC") by April 2002 and no later than July 31, 2002.

Since then, BWSC has completed its evaluation to determine the scope of work necessary to raise the weir, and the Authority and BWSC have reached an agreement regarding their responsibilities for the work and costs. BWSC's scope evaluations considered the structural engineering requirements for raising the weir and whether the weir raising would necessitate removal and replacement, or reconfiguration, of the underflow baffle which BWSC installed in 2000 to control floatable materials, in compliance with the milestone in Schedule Six.

BWSC determined that the design of the weir will necessitate structural engineering analyses to ensure that the new weir is structurally sound under large storm and high flow conditions. BWSC also determined that the underflow baffle does not need to be altered for construction of the weir. Recently, BWSC executed a contract for engineering design services related to both the weir raising and the installation of a new tide gate in the Dorchester Brook Conduit system, in the overflow conduit downstream of regulator RE070/8-15. The Authority had recommended the new tide gate, along with raising the

weir, to optimize system performance and minimize overflows. The design work is underway, and BWSC expects to finalize the construction documents by July. The schedule for raising the weir will depend on how extensive the work is and whether it can be performed by BWSC crew or will be included in a construction contract. While BWSC may be able to reconstruct the weir with its own crew by the end of July, it is more likely that outside contractor services will be necessary. Under this scenario, BWSC expects that all work associated with the weir and tide gate will be completed this fall.

In the meantime, BWSC implemented a third recommendation made by the Authority regarding CSO discharges to the Dorchester Brook Conduit. This recommendation involves cleaning of the dry weather connection to the interceptor system downstream of regulator RE-070/8-15. In March, BWSC removed sediments from this connection, although the presence of sediments was not as extensive as originally estimated by the Authority. The cleaning work helps to maximize the connection's capacity to convey wet weather flows and minimize upstream overflows.

With all improvements, including raising the weir, expected to be completed over the next few months, the Authority plans to include flow metering at the most active regulator tributary to the Dorchester Brook Conduit in its temporary flow metering program in 2003, to verify the predicted CSO discharge levels.

(g) Floatables Control and Outfall Closings.

As previously reported, the Authority conducted system inspections, flow metering and hydraulic analyses in 2000-01 to update its predictions of CSO discharge frequency and volume at regulators tributary to outfalls MWR 018, 019 and 020, which provide relief to the Boston Marginal Conduit, as well as at outfall MWR 010.[9] From these investigations, the Authority last year recommended several system optimization or maintenance measures to minimize the discharges at these locations. These measures included restoring the Town of Brookline's primary connection to the Authority's interceptor at MWR 010 and raising overflow weir elevations and modifying operational procedures at the Prison Point CSO facility for MWR 018-020. As noted in last quarter's report, the Authority was preparing a letter report for EPA and DEP summarizing activities related to these measures. On June 11, 2002 the Authority submitted this report to EPA and DEP. A copy is attached as Exhibit "B." The letter summarizes the recommendations and their intended purposes for each location and provides a status report on the work completed or underway to implement the recommended improvements for MWR 010 and MWR 018-020 as well as the Dorchester Brook Conduit. In addition, the letter formally requests that EPA and DEP approve the Authority's current plan, which recommends leaving MWR 010 open and not providing floatables control at seven of the regulators tributary to MWR 018-020. Under the Authority's current proposal, overflows at MWR 010 will be eliminated during a two-year storm, and overflows to MWR 018-020 will not occur in a typical rainfall year.

(h) Storage Conduit for BOS 072 and BOS 073.

In May, Authority staff selected a consultant for design and other engineering services for the Fort Point Channel (BOS 072 and BOS 073) and BOS 019 storage conduits and expect to seek approval to award the design contract from the Board of Directors at the June 26 Board meeting. If approved, the Authority plans to award the contract for design services and issue the notice to proceed in July 2002 in accordance with Schedule Six.

The design contract will combine two CSO storage projects, one at Fort Point Channel in South Boston and the other adjacent to the Little Mystic Channel in Charlestown. The Fort Point Channel project involves a 10-foot diameter, 1,500 foot long conduit to be constructed along A Street in South Boston using tunneling methods, to capture and store CSO flows from outfalls BOS 072 and BOS 073 for all but the largest storms in a typical year. The Charlestown project involves a 380-foot long, 12-foot by 12-foot box conduit to be constructed adjacent to the Tobin Bridge to store most of the CSO flows that now discharge at outfall BOS 019. A pump-out and odor control facility will be constructed as part of each project, for dewatering and ventilation of the conduits. Both projects also include the installation of underflow baffles within the existing and any proposed CSO regulators, to provide floatables control.

(i) CSO Quarterly Progress Report.

Pursuant to Schedule Six, the Authority submits as Exhibit "C" 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.

2. Deer Island Public Access.

On May 23, 2002 the Authority was pleased to host an event to mark the opening of the public open space on Deer Island. The 60-acre newly created area includes 2.6 miles of paved handicapped accessible perimeter path, 10 landscaped overlooks, a six-boat mooring basin, a designated fishing area and plans for several memorials to commemorate Deer Island's history.[10]

The event was well attended and among the noted speakers featured at the event were the Honorable Governor Jane Swift, the Honorable A. David Mazzone and EPA Regional Administrator Robert Varney.

Following the opening speeches there was a tree planting ceremony. The species chosen was the American Elm. Aside from its designation as the state tree of Massachusetts, it is fitting for the dedication of the opening of the park as this once endangered tree is symbolic of the restoration and rejuvenation of the natural environment of Boston Harbor.

The island has been designated as a part of the Boston Harbor Islands National Recreational Area. Future plans include boat tours and track club races.

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: June 13, 2002

Notes:

1. See March 15, 2002 Compliance and Progress Report, pp. 2-4 and December 17, 2001 Compliance and Progress Report, pp. 4-6.

2. On April 30, 2001, the Authority and the City submitted an NPC describing the revised plan to separate sewers to control CSO discharges to Alewife Brook. On June 15, 2001, the Secretary of Environmental Affairs issued a Certificate on the NPC, which required the Authority and the City to prepare a response to comments document. See September 17, 2001 Compliance and Progress Report, pp. 5-6.

3. See March 15, 2002 Compliance and Progress Report, Exhibit "A" CSO Control Plan Annual Progress Report 2001 March 2002, p. 30.

4. See March 15, 2002 Compliance and Progress Report, p. 7, and December 17, 2001 Compliance and Progress Report, pp. 7-8.

5. See April 26, 2002 Special Report of the MWRA Concerning Construction of Interceptor Relief for BOS 003-014, March 15, 2002 Compliance and Progress Report, pp. 9-10, and Exhibit "A," CSO Control Plan Annual Progress Report 2001 March 2002, pp. 17-18.

6. 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.

7. See Note 6.

8. See the Authority's Motion to Amend Schedule Six dated July 31, 2001.

9. See Compliance and Progress Reports dated March 15, 2002, pp. 7-9 and June 14, 2001, pp. 4-8.

10. See previous reports about the Authority's Public Access Plan in Compliance and Progress Reports dated September 15, 1994, pp. 14-16, October 17, 1994, pp. 23-24, December 16, 1996, pp. 11-12, and October 15, 1998, p. 9.