UNITED STATES DISTRICT COURT

for the

DISTRICT OF MASSACHUSETTS

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UNITED STATES OF AMERICA,.

Plaintiff.

CIVIL ACTION

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 MONTHLY COMPLIANCE REPORT FOR

JULY 2000 AND PROGRESS REPORT AS OF AUGUST 15, 2000

The Massachusetts Water Resources Authority (the "Authority") submits the following monthly compliance report for the month of July 2000 and supplementary compliance information in accordance with the Court's order of December 23, 1985, subsequent orders of the Court and undertakings of the Authority.

1. Schedule Six.

A status report for the scheduled activities for the month of July 2000 on the Court's Schedule Six, certified by Douglas B. MacDonald, Executive Director of the Authority, is attached hereto as Exhibit "A."

A. Activities Completed.

1. Commence Construction of Outfall Repairs and Floatables Control at CHE 008.

As previously reported, on December 31, 1999, the Authority issued a Notice to Proceed for construction of repairs and floatables control at combined sewer overflow ("CSO") outfall CHE 008, as part of the contract for construction of the Chelsea Branch Sewer Relief project.1 Outfall CHE 008 discharges CSO and separate stormwater flows to the Chelsea Creek.

The plan for outfall repairs under this contract includes replacing the last 30 feet of the pipe and the adjoining headwall structure and laying new riprap for erosion control. This project also includes the installation of an underflow baffle at the sole regulator structure associated with this outfall, to provide floatables control consistent with the recommended plan in the 1997 Final CSO Facilities Plan/Environmental Impact Report ("Final FP/EIR"). The construction schedule calls for all work associated with the outfall repairs and floatables control, as well as relief of the Chelsea Branch Sewer, to be substantially complete by June 2001, in compliance with Schedule Six.

2. Commence Construction of Stony Brook Sewer Separation.

On July 10, 2000, the Boston Water and Sewer Commission ("BWSC") issued a Notice to Proceed for the first construction contract to separate the combined sewer systems tributary to the Stony Brook Conduit and CSO outfalls BOS 046 and MWR 023, which discharge to the Back Bay Fens and the Charles River, respectively. This contract focuses on removal of catch basin connections to the sanitary sewer system and includes work throughout Jamaica Plain, Roxbury and Mission Hill. BWSC plans to issue other contracts over the next few years in order to complete the sewer separation project by September 2006, as required by Schedule Six.

B. Activities Not Completed.

1. Commence Design of In-line Storage for Dorchester Brook Conduit.

As anticipated, the Authority did not commence design of In-line Storage for the Dorchester Brook Conduit in compliance with Schedule Six. The Authority's Final CSO Facilities Plan approved in 1997-1998 does not include this project, although it remained a part of Schedule Six on July 31, 2000. On that date, the Authority filed a motion, assented to by all the parties, to amend Schedule Six by deferring the milestones relating to design and construction of the project for one year and by adding a new milestone for the submission of a report on the results of additional flow metering and system hydraulic modeling to the Environmental Protection Agency ("EPA") and the Massachusetts Department of Environmental Protection ("DEP") by January 31, 2001. The Court allowed the motion on August 9, 2000.

The Authority was surprised by the comments on the motion in the Response of the United States filed on August 7, 2000. The Authority recalls no discussion in 1998 when Footnote 38 was added to Schedule Six regarding the specific nature of the monitoring to be conducted to confirm CSO activations. If the United States had a particular type of testing program in mind at that time, it failed to communicate that assumption to the Authority. In fact, at the time, the concept of block testing was actually proposed to the Authority informally by EPA staff, based on an expectation that a simple procedure might well be sufficient to demonstrate the infrequency of overflows. Furthermore, the Authority felt no need to "argue" in its recent Motion (to which the United States indicated that it would assent) that delays in achieving "Future Planned Conditions" justified deferral of the milestones, because completion of the new outfall is an obvious and significant component of those conditions. The United States' representation that "the collection and treatment system sufficiently approximates 'Future Planned Conditions' . . ." has not been verified.

C. Progress Report.

1. Fiscal Matters.

(a) Capital Improvement Program.

Printed copies of the Authority's Capital Improvement Program for Fiscal Years 2001-2003, approved on May 24, 2000, are now available. 2 A copy is attached as Exhibit "B."

(b) State Funding.

On July 28, 2000, the Governor signed the Commonwealth's budget for Fiscal Year 2001, following its approval by the Massachusetts Legislature on July 18, 2000. As anticipated, the budget includes $53.914 million for debt service assistance, $500,000 for the operation and maintenance of the Clinton Wastewater Treatment Plant, $41.87 million for a state contribution to the Clean Water Act State Revolving Fund and $10.63 million for the Safe Drinking Water Act State Revolving Fund. Additionally, the signed budget includes a provision to change the Massachusetts Water Pollution Abatement Trust and State Revolving Fund program by adding language that would require communities to contribute two percent toward the interest costs on loans effective calendar year 2002.

2. Harbor Management

(a) Construction of Effluent Outfall Tunnel.

In July, following confirmation of good air quality throughout the tunnel, the tunnel contractor proceeded with removal of equipment left in the tunnel from the July 1999 incident and the placement of portable lighting and generators to support the diffuser plug pulling operation, which began on July 21. By July 25, workers had pulled the 52 remaining plugs and removed them from the tunnel, along with the communication cable, all lights and portable equipment. After completing punchlist items on the sodium bi-sulfite lines and in the tunnel shaft on July 28, the contractor disconnected the power to the remaining dewatering pump, commencing the process of flooding the tunnel by groundwater inflow, and removed the pump and pump deck. In the meantime, the separate tunnel start-up contractor completed removing the nuts from the pressure relief valves on each of the diffusers and drilling back-up pressure relief holes in one nozzle cap on each diffuser riser, to reduce the risk of extreme pressure build-up in the risers during final tunnel filling.

After the outfall contractor removed utility lines and performed various finish work in the shaft and connecting conduit, on August 4 supplemental flows were introduced to augment tunnel flooding. On August 11, the flows were stopped temporarily to allow the contractor to reinstall the manhole cover on diffuser No. 3 and prepare for demobilization of the offshore platform used to stage tunnel ventilation. The manhole cover was reinstalled and the casing was flooded by the afternoon of August 11. The contractor also installed a stilling well at the top of the tunnel shaft, which will house the permanent level sensor. With this work completed, supplemental flows, at a reduced level, were reintroduced. Filling the tunnel is continuing and expected to be complete by August 17. Thereafter, divers will remove 270 nozzle caps from the diffusers, to prepare the tunnel to be placed into service. This final work is weather dependent, and its estimated duration will be uncertain until the divers gain actual experience in cap removal.

(b) Construction of Secondary Battery C.

Over the past month, the contractor's activities in Secondary Battery C have been constrained by the wet and humid weather. For approximately 12 days, the contractor was unable to work on the concrete coating punchlist items in the reactor battery and effluent channel, because of unfavorable humidity and dew point levels, which resulted in a day-for-day delay. The Construction Manager ("CM") and contractor have revised the schedule for the remaining activities to mitigate the impact of this delay upon facility start up. Emphasis is now on completing the work remaining on all the components required for the inter-CP testing of the Return Sludge Line ("RSL") pumps, so that once started, the inter-CP test of the 12 RSL pumps will immediately follow completion of the six pump test, and the 18-pump test will immediately follow completion of the 12-pump test.

The contractor has completed work on and the filling of 11 clarifiers and is currently filling two more. The contractor has also commenced filling a reactor train, the reactor effluent channel and the clarifier influent

channel. The CM expects to perform inter-CP testing of the automated controls for the RSL system today through Thursday, to be followed by the contractor's functional test of multiple pumps. Assuming no new issues arise, all contractor and inter-CP testing is currently scheduled to be completed and the facility turned over to Deer Island Treatment Plant for water testing by mid-September.

3. Combined Sewer Overflow Program.

(a) Cambridge Sewer Separation.

On August 1, 2000, the Authority submitted to EPA and DEP the anticipated Draft Report on Re-evaluation of CSO Control Alternatives for Alewife Brook. The report presents an updated characterization of CSO discharges (outfall locations, activation frequency and discharge volume) tributary to Alewife Brook, based on a lengthy process of field investigations, preliminary design efforts, updated flow metering and re-analysis using an upgraded hydraulic model, all conducted since design efforts began in early 1997 and the Authority first reported the enormity of differing conditions in 1998.3 The report also evaluates a range of CSO control options using technology-based and water quality-based analyses and presents the Authority's revised recommended plan for Alewife Brook CSO control, as previously reported.4

In the report, the Authority attempted to address the issues and concerns raised by EPA, DEP and U.S. Department of Justice staff at the meeting the Authority hosted on this subject on July 14, 2000. The Authority expects to meet again with these parties on August 21, 2000, to continue discussions towards finalizing the plan to control Alewife Brook CSOs.5 The Authority hopes to file a final report on the revised plan soon, to comply with regulatory requirements, including public review.

(b) Cottage Farm CSO Facility Upgrade.

The Authority continues to work on addressing the problems encountered with the automatic sampling systems and flow meters at the newly upgraded Cottage Farm CSO Facility. Although the problem with the automatic influent sampling system appears to be resolved, the Authority has been unable to retrofit the effluent pre- and post- dechlorination sampling systems because some of the plumbing fixtures required are on back order. The Authority will proceed as soon as the fixtures are available.

With respect to the automated flow and residual chlorine-based chemical dosing system, the Authority is continuing to study alternative methods of flow measurement. Currently, the Authority is reviewing a modified flow metering system that uses ultrasonic level measurements. If this alternative proves to be promising, the Authority will move forward with design.

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

The Authority is continuing to prepare a draft Notice of Project Change describing alternative sites and approaches for the projects planned to provide CSO control to North Dorchester Bay beaches and to Reserved Channel. It hopes to have a document ready for distribution to interested parties within the next few weeks.

(d) Variance for CSO Discharges to Charles River.

On July 28, 2000, DEP extended the term of the October 1, 1998 Variance issued to the Authority under the Massachusetts Surface Water Quality Standards for CSO discharges to the Lower Charles River Basin to October 1, 2001. This action followed the public forum held by DEP in June, described in last month's report.6

In addition to extending the Variance, DEP also revised two Variance conditions by amending the completion date for certain activities from July 1, 2000, to July 1, 2001. This change will allow incorporation of information the United States Geological Survey ("USGS") is collecting under its ongoing Charles River water quality study into upgraded sewer system and receiving water modeling and cost-benefit analyses related to the evaluation of additional CSO storage at the Cottage Farm facility. All other variance conditions remain in force.

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: August 15, 2000

NOTES:

1. See Compliance and Progress Report dated January 18, 2000, pp. 5-6.

2. See June 15, 2000, Compliance and Progress Report, p. 4.

3. Throughout the review period, the Authority has worked intensely with City of Cambridge staff and consultants, often on a weekly basis, for the purpose of understanding the differing conditions, exploring design approaches and alternatives and negotiating complex technical, policy and cost issues that have significant implications for both the Authority and the City of Cambridge.

4. See Compliance and Progress Reports dated July 17, 2000, pp. 8-9, and May 15, 2000, pp. 9-10.

5. The City of Cambridge, with funds and other assistance provided by the Authority, continues to make design and construction progress to separate the combined sewer system tributary to CAM 004.

6. See July 17, 2000 Compliance and Progress Report, pp. 12-13.