

## MWRA ADVISORY BOARD

*Summary of:*

### MWRA BOARD OF DIRECTORS' MEETING

May 12, 2004

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A meeting of the Board of Directors of the Massachusetts Water Resources Authority was held on **May 12, 2004** at the Charlestown Navy Yard. **Present:** Chair Ellen Roy Herzfelder; John Carroll, Andrew Pappastergion and Joseph Foti, Advisory Board Representatives; Lucile Hicks, Gubernatorial Appointee; Vincent Mannering, Kevin Cotter and Antonia Pollak, City of Boston Representatives; Joseph MacRitchie, City of Quincy Representative; Marie Turner, Town of Winthrop Representative. **Absent:** Donald Mitchell, Gubernatorial Appointee.

### AGENDA

#### **Report of the Chair**

Calling its activation a "milestone," Chair Ellen Roy Herzfelder congratulated staff on completion of the \$665 million Norumbega Covered Storage Facility in Weston, MA.

#### **Report of the Executive Director**

Executive Director Fred Laskey congratulated Board Member Joseph Foti on his recent reelection as Advisory Board representative to the Board. Mr. Laskey thanked staff who helped organize the May 6<sup>th</sup> "Topping Off" celebration in Weston.

Mr. Laskey reported the South Boston CSO Project plan received a "hearty" endorsement from the Environmental Protection Agency and the US Department of Justice. There is, however, some concern amongst residents and also from the Conservation Law Foundation relative to transfer of stormwater through pipes under Morrissey Boulevard to Patten's Cove.

Advisory Board Executive Director Joseph Favaloro said in order to reach consensus, the Authority abandoned significant principles regarding affordability and ensuring the cost equals the benefit. Last but not least, the Authority is going way beyond its legal responsibility in accepting stormwater, much to the chagrin of Advisory Board staff. Opponents such as the Conservation Law Foundation keep raising the bar with the expectation that the Authority will spend more dollars. Mr. Favaloro added, "Maybe we should tell the court parties the whole plan is off the table."

Mr. Laskey said the contentious issues seem to be South Boston stormwater going through Dorchester and the effect on Patten's Cove. He said Senator Hart represents both communities (South Boston and Dorchester) and has been involved in community meetings on the project. Though Mr. Laskey is sympathetic to the Senator's situation, he has not lost sight of the Authority's

overall goal. He added the EPA representative has been very vocal in supporting the plan at the meetings.

Mr. Laskey reported there has been a fairly dramatic increase in flounder lesions picked up through monitoring conducted by the Authority. Save the Harbor/Save the Bay is releasing a public statement on the safety of eating flounder and the Globe may be working on a story. Andrea Rex reported last year was the first year these lesions were found. Last year, the level of flounders with lesions was only 1-2%. The most recent findings were over 40% seven miles south of the outfall. No incidents were discovered in Cape Cod.

Ms. Rex said the science on these lesions is very poor. Staff is currently conducting pathology tests and checking for microorganisms. Michael Hornbrook added when the Authority was discharging into the harbor, no lesions were found. In other words, it is doubtful the MWRA is responsible for the lesions. Board Member John Carroll asked if similar lesions have been found on other fish. Staff replied sometimes on striped bass but not in such dramatic numbers.

Mr. Laskey congratulated staff on the 2002 State of the Harbor Report. He reported the Senate version of the FY05 budget included the creation of the Watershed Protection Trust, \$10 million in sewer rate relief funds, the bond cap increase and the tort claims act. He thanked Charlene Rideout and Mike Ralph for their hard work, as well as Advisory Board staff.

## **APPROVALS**

### **Authorization to Surplus Site at FRSA**

The Board voted to authorize the Executive Director, on behalf of the Authority, to declare an approximately 1.8 acre parcel on Cleverly Court in Quincy, MA, marked "Cleverly Court West" as surplus to the construction, maintenance and operation of the sewer and waterworks systems as of November 1, 2004.

### **Lease with MBTA at FRSA**

The Board voted to authorize the Executive Director, on behalf of the Authority, to execute a lease with the Massachusetts Bay Transportation Authority for the parcel of land known as the museum parcel at FRSA, for a term of six months beginning May 17, 2004 with rent at \$14,520 per month. Board Member Jay MacRitchie abstained.

Mr. MacRitchie made a motion to grant Quincy, the host city, \$5,000 per month. The motion failed to receive a second.

### **Emergency Water Supply Agreement with the Town of Wilmington**

The Board voted to authorize the Executive Director, on behalf of the Authority, to execute a six-month Emergency Water Supply Agreement with the Town of Wilmington effective May 12, 2004, as approved by the MWRA Advisory Board on April 22, 2004.

### **May PCR Amendments - FY2004**

The Board voted to approve amendments to the Position Control Register. The annualized budget impact of these changes would theoretically range from a cost of -\$32,339 to a cost of \$65,125. Those that make up the financial impact are as follows:

<b>Current Title</b>	<b>Amended Title</b>	<b>Financial Impact</b>
Program Manager Facilities	Instrument Technician	-\$36,597 - -\$24,485
Secretary I	Executive Secretary	\$678 - \$11,841
Skilled Laborer	Equipment Repair Foreman	\$5,539 - \$19,221
Skilled Laborer/MTD	HVAC Specialist	\$3,651 - \$16,786
Senior Field Inspector	Senior Field Inspector	\$5,810 - \$5,810
WPT Maintenance Technician	M&O Specialist	-\$1,034 - \$12,100
QA Planner	Project Manager	\$3,765 - \$3,765
Site Operations Supervisor	Program Manager, Security/Safety	\$10,109 - \$30,943

**Appointment of Special Assistant for Affirmative Action**

The Board voted to approve the Executive Director’s recommendation to appoint Patterson A. Riley, Jr. to the position of Special Assistant for Affirmative Action and Compliance, AACU, at an annual salary of \$80,700.00 to be effective on the date designated by the Executive Director.

**Appointment of General Counsel**

The Board voted to approve the Executive Director’s recommendation to appoint Steven A. Remsberg to the position of General Counsel at an annual salary of \$115,000.00, to be effective on the date designated by the Executive Director.

**Appointment of Associate General Counsel, Capital & Operations**

The Board voted to approve the Executive Director’s recommendation to appoint John V. Navoy, Esq. to the position of Associate General Counsel, Capital & Operations in the Law Division, at an annual salary of \$100,857.00, to be effective on the date designated by the Executive Director.

**CONTRACT AWARDS**

**Instrumentation Maintenance Service: ABB Automation, Inc., Contract OP-18**

The Board voted to approve the award of Contract OP-18, Instrumentation Maintenance Service, to the lowest responsive bidder, ABB Automation, Inc., and to authorize the Executive Director, on behalf of the Authority, to execute and deliver said contract in the bid amount of \$445,605.00 for a term of 730 calendar days from the Notice to Proceed.

**Weston Aqueduct Supply Main 3, Section W-12: Replacement and Rehabilitation of Pre-stressed Concrete Cylinder Pipe with Class IV Pre-stressing Wire**

The Board voted to approve the recommendation of the Consultant Selection Panel to select Parsons Brinckerhoff to provide design and construction administration/resident inspection services in connection with the sliplining of the Weston Aqueduct Supply Main Number 3, Supply Pipeline 12, Prestressed Concrete Cylinder Pipe and to authorize the Executive Director, on behalf of the Authority, to execute a contract with Parsons Brinckerhoff in an amount not to exceed \$294,587.00 for a term of 730 days from the Notice to Proceed.

This project includes two additional sections of WASM 3. The plan is to repair 2,000 feet of pipe over the winter. The design has to be completed by August. Three proposals were received on Monday.

Staff explained, in the 1970s, this particular type of pipe was produced, but only for a few years. Subsequent failures were catastrophic and cities around the country have been replacing it. Mr. Pappastergion asked why the contract is for two years. Staff explained the consultant will be kept on through the one-year warranty.

## **CONTRACT AMENDMENTS/CHANGE ORDERS**

### **Ancillary Modifications Phase 3-1 - Deer Island Wastewater Treatment Plant: Fay, Spofford & Thorndike, Contract 6591, Amendment 2**

The Board voted to authorize the Executive Director, on behalf of the Authority, to approve Amendment No. 2 to extend the time for completion of Contract No. 6591 with Fay, Spofford & Thorndike, Inc., Ancillary Modifications Phase 3-1, Deer Island Wastewater Treatment Plant, by 540 calendar days to November 27, 2005.

Amendment 2 is for a time extension only and does not impact the total contract amount.

### **Walnut Hill Water Treatment Plant - Ozonation Treatment Facilities: Barletta-Shea, J.V., Contract 6489, Change Order 74**

The Board voted to authorize the Executive Director, on behalf of the Authority, to approve Change Order No. 74 to increase the amount of Contract No. 6489 with Barletta-Shea, J.V., Walnut Hill Water Treatment Plant, Ozonation Treatment Facilities, in the amount of \$213,300.

The original amount of the Contract was \$116,844,000. Change Order 74, in the amount of \$213,300 brings the total cumulative value of change orders to \$13,735,157 or 11.75% of the original contract amount. The adjusted subphase total is \$130,579,157, or \$2,576,157 over budget. Work on this contract is 92% complete.

The Board voted further to authorize the Executive Director to approve additional change orders as may be needed to Contract No. 6489 in amounts not to exceed the aggregate of \$250,000.00 and 180 calendar days.

Staff explained this change order is to facilitate major testing of backup systems, including a thorough review of the electrical distribution system, applying lessons learned from the Deer Island outages.

## **INFORMATION**

### **MWRA Insurance Program Renewal - Status Update**

Paul Whelan summarized the staff summary regarding MWRA Insurance Program renewal. The current program expires at the end of June. Bids are due the end of the week (May 14). He explained the General Bond Resolution requires the Insurance Reserve Fund. It assures investors the Authority can cover potential liabilities within current self-retention limits. Any material change to the current structure will require an increase in the Insurance Reserve Fund.

Staff has asked an insurance consultant to look at three scenarios: self-insuring all general liability, self-insuring all property, and self-insuring both. Staff is comparing additional risks and additional costs.

Mr. Laskey said the goal has been to prepare the Board for the upcoming discussions on which option will be best for the Authority. There are differences of opinion amongst staff. Board Member Lucile Hicks asked if not increasing the Insurance Reserve Fund from \$18 million to \$21 million, as suggested, would scare off an investor. She also asked if an investor looks at the Reserve Fund and thinks the Authority's insurance does not cover something.

Ken Wissman said as long as the Authority has a respected insurance advisor saying 'we are okay,' it should be fine. "It's all a question of proper perspective," Ms. Hicks summarized.

### **Orange Notebook**

Michael Hornbrook made a presentation on MWRA maintenance procedures. The Deer Island operating staff now does light maintenance. This quarter, 10-15% of preventive maintenance was done by the operations staff. This helps decrease maintenance backlog. Additionally, more preventive maintenance work orders have been completed. Deer Island is currently above the industry benchmark with a 98% work order completion rate.

There has also been an increase in the number of work orders organized in advance or 'kitted.' The Authority is almost at its goal (established as part of the Facilities Asset Management Program and in talking with other utilities) of 10%. There has been a steady increase in predictive maintenance work orders. The rate currently stands at 5.4%.

Maintenance backlog, as measured in crew weeks, is an important measuring stick. The industry benchmark range is 3-6 crew weeks. The Authority is currently in the high end of that range. The Authority is not doing as well with main line valves exercised and main line valves replaced. The Authority conducts regular surveys of the water distribution system for leaks, with an annual goal of 170 miles surveyed and no more than two leaks outstanding. Through March of 2004, it appears as though the target will be met.

With regard to wastewater pipeline and structure inspections, the Authority is also on track to meet the target of 13% (about 32 miles) annually. The Authority is ahead of the ten-per-month goal of rehabilitating manholes (frame and cover). Inverted siphon inspections and cleaning, which help maintain siphon flow, is on target for inspections and close to the 50% target for cleaning annually, or 9 each month.

Board Member Vincent Mannering asked if overtime and sick day rates have been looked at recently. Ken Wissman answered there are initiatives in place to reduce "conspiracies," when one employee calls in sick so another can have overtime. Initiatives include making staff mobile - capable of covering at other plants when someone calls in sick. Sick time has also increased amongst those taking early retirements this June. Mr. Mannering added, "Keep a vigilant eye on this." Mr. Laskey said, in hindsight, a nine-month lead for the early retirement program was not a good idea.

### **Funding for New Projects in the Proposed FY05 CIP**

Michael Hornbrook summarized major new work included in the proposed capital budget. The intent was to give the Board background information about the projects before approving the final FY05 CIP in June. While the presentation did not address the Advisory Board's comments and recommendations on these projects, they will be addressed at the Board hearing on the proposed budgets on June 2. Mr. Pappastergion noted that "while we appreciate that this is an information staff summary, I don't want it to preclude a full and fair discussion" at the June 2 hearing.

The draft of the final FY05 CIP includes \$274 million in funding for new capital work. Most of the new spending, \$236 million, will occur in the years beyond the FY04-08 cap period, although 77% of that spending is for projects or initiatives scheduled to begin during the FY04-08 cap period. Spending of \$8 million on new projects is identified for **FY05**, and involves primarily nine projects whose total costs come to \$45 million. Among them are a fifth phase for the Infiltration and Inflow Local Financial Assistance Program (\$18 million); Quabbin Transmission System project, Oakdale Valves (\$12.1 million); Rehabilitation of (five) Other Water Pump Stations, Design 2 (\$4.5 million); and Additional As-Needed Design Services (\$5 million) for Deer Island, Walnut Hill and off-island wastewater facilities.

The updated CIP includes \$11.7 million in spending on new work in **FY06**. It is primarily attributable to projects starting in FY05, but also includes \$1 million on two new projects including the \$102 million Interceptor Renewal Program.

Another \$18 million in spending on new projects is budgeted for **FY07** and **FY08**, and is primarily due to projects scheduled to start in FY05 and FY06. The Authority also proposes new work commencing in these years to modify the Cambridge Branch Sewer, add ultraviolet disinfection to the Walnut Hill Water Treatment Plant, and provide permanent site improvements to approximately 50% of the wastewater metering system.

### **Braintree-Weymouth Relief Facilities Update**

Michael McBride provided a thorough review of the status of the seven construction contracts that make up the Braintree-Weymouth Relief Facilities project. Three have been completed, two are under construction and the last two are in the final stages of design. The project goal is to provide hydraulic capacity of 73 mgd, thereby improving wastewater transport operational efficiency and reducing the potential for environmental impacts in Braintree, Weymouth and Quincy. Three major milestones continue to be tracked: transport wastewater from the South System through the new Intermediate Pump Station to Deer Island and transport sludge from Deer Island to the Fore River Staging Area. Staff anticipate that both these milestones, scheduled for October/November 2004, will be met. The third milestone, to complete all project construction, will be completed in 2007.

Work is proceeding on the design and construction side, but there are concerns that work is six weeks behind schedule. The work should still be completed by the end of the year. Mothballed equipment has been audited and warranties will begin when the equipment is taken over by the Authority. Hardware is at the location, but the programming is still undergoing tests beginning May 10<sup>th</sup>.

### **Wastewater Metering Replacement Project Update**

The project includes the installation of 196 replacement meters and 24 replacement remote terminal units, plus the upgrade of all data handling and communications capabilities.

Hardware is in place and the RJM Group has trained MWRA staff. Software is still being developed, there were some issues with integrating. Replacements began in March. There are ten new meters in the ground in Norwood, Weston and Canton. The number of meters necessary in a community is a function of the number of connections in each community. There is a very formal procedure in place for accepting new meters once installed. In house, staff are now reviewing data on the ten meters and looking to see if calibration is sound. None have been accepted as yet. The contractor is paid upon acceptance of each meter.

Mr. Mannering asked how we know if new meter information is accurate. Staff replied they compare data from past similar conditions. Variations of about 10% can be expected. Any more is suspicious. Ms. Hicks asked how the Authority decides which meters to replace first. Staff replied geography and police details play a role.

### **Deer Island Wastewater Treatment Plant: Power Outage Follow-up Activity Report**

John Vetere informed the Board there are two independent consultants (one from Camp, Dresser and McKee and one from Stone and Webster) taking inventory on Deer Island and speaking to staff about the power outages that occurred in April. They are tasked with drafting recommendations for equipment and procedures and drawing conclusions. Mr. MacRitchie asked if either consultant was involved in the original plant design. Mr. Vetere said the Stone & Webster employee was, but staff does not believe there is a conflict.

The two have given daily reports to Michael Hornbrook and have been kept on "a very short leash." They will also produce a ten-day report and a final report. A draft received this week includes the following conclusions: power loss by NStar was the root cause of both events; on April 3, there was an internal fault in the UPS and there was a lack of redundancy on the forced main panel; on April 11, there were problems with the electrical distribution system and a loss of emergency DC power. The draft also recommended UPS and battery backups. All batteries have been tested. Staff has examined procedures for maintaining the battery systems and has instituted new procedures. A modified black start has been performed on one of the CTGs. Better emergency lighting is also being looked at, as is improving coordination of protocols with NStar.

A certified letter has been sent to NStar requesting a breakdown of the April 11<sup>th</sup> outage and their delayed responses. On April 26, MWRA staff met with EPA and DEP (DEP sent a similar request for documentation to NStar, giving them 30 days to respond.)

Ms. Hicks asked if there has been biological harm. Mr. Hornbrook said none has been found in shoreline walkthroughs. In sampling, there was a short-term elevated fecal coliform count for one or two days in the basin.

### **Update on Lead and Copper Rule Compliance**

Tiffany Tran updated the Board on an April 29 letter received from DEP denying MWRA's request to invalidate some samples. DEP is mandating a public education program. They are also requiring

a lead service replacement program for communities over 15 ppb, the lead action level. MWRA is currently at 17. Under the program, 7% of lead services must be replaced annually until either all are replaced or two rounds of sampling return results below the action level.

Representatives from the ten communities that exceeded lead action levels in 2003 met in Chelsea last week, along with three more communities that exceeded in the first round of 2004.

It is important to note there is no lead in the source water. Lead leeches from brass faucets and solder which seals joints between household pipe. Taps should be run until water is cold to flush out any residue. Staff plans to increase alkalinity of the water treatment and increase corrosion control. DEP rejected MWRA's request to increase alkalinity levels to 45 mg/l. Instead, they approved an increase to 40 mg/l.

Chair Ellen Roy Herzfelder asked if there are testing kits available for homeowners concerned about lead levels in their water. A list of certified labs is on the MWRA website. Kits cost about \$20-\$30.

The next round of sampling will be in September.

Board Member Andrew Pappastergion asked if anybody knows the cost of implementing the lead service replacement program. Mr. Hornbrook said no. He recommends towns start thinking about lead service numbers and conducting house-to-house inspections.