District of Columbia
Water and Sewer Authority

Board of Directors

Retail Services Committee
Monday, November 23, 2009

09:30 a.m.

MEETING MINUTES

Committee Members Present
Joseph Cotruvo, Chairman
Howard Gibbs
David J. Bardin
Brenda Richardson

WASA Staff Present
George Hawkins, General Manager
Leonard Benson, Acting Chief Engineer
Avis Russell, General Counsel
Linda Manley, Board Secretary

I. CALL TO ORDER

Dr. Cotruvo called the Retail Services Committee Meeting to order at 09:39 a.m.

II. WATER QUALITY MONITORING

1. LCR Compliance Testing 1st and 2nd Draws:

Mr. Rich Giani, Water Quality Manager, provided an update on the status of the Lead and Copper Rule (LCR) compliance testing activities. He reported that 79 1st draw samples have been collected and analyzed to date. One (1) 1st draw sample has exceeded the EPA Action Level of 15 ppb; and the 90th percentile for 1st draw samples was 7 ppb. Mr. Giani also reported that 56 2nd draw samples have been collected and analyzed to date. Eight (8) 2nd draw samples have exceeded the EPA Action Level; and the 90th percentile for 2nd draw samples was 16 ppb. Mr. Giani provided the Committee with the specific results associated with the LCR samples; and he reported on the potential effects of iron (galvanized pipe) on lead levels.

Mr. Giani also provided the Committee with a breakdown of this year's LCR samples in terms of those that have received a partial (portion of service line is still lead) lead service replacement (LSR) versus those that have not received an LSR (all of service line is comprised of lead). Mr. Giani noted that to this point, the data has shown that the results were essentially the same for those homes with a partial LSR in comparison to those homes with a full lead service. Those samples with full lead service lines were only slightly

higher. A Committee Member requested that future data reporting should include the date when the partial LSR was performed and the dates of follow up sampling.

WASA Staff was requested to provide these detailed data to DDOE (Pierre Erville, Pierre.erville@dc.gov) and Ted Graham tgraham@mwcog.org at COG) to assist the contractor tasked with the design of the DDOE Independent Water Quality Study.

2. Coliform Testing:

Mr. Giani reported that one (1) sample tested positive for coliform in the month of October. As of the meeting date, three (3) samples have tested positive for coliform in the month of November – and they have come within the past 10 days. Mr. Giani noted that the positive results may be due to nitrification – which was the topic of his subsequent presentation.

3. Distribution System Nitrification:

Mr. Giani gave a presentation to the Committee concerning nitrification within cast iron mains in the DCWASA distribution system. He described the issue of nitrification and why it is of concern to WASA. Graphics were used to depict: 1) the downward trend in chlorine levels over the past four years in the summer months and 2) that nitrite levels have increased significantly in mid to late 2009, which indicates a substantial increase in nitrification and biofilm activity. Mr. Giani noted that as biofilms grow, the potential for positive total coliform samples will increase, and that these increased biofilms were the most likely cause for the higher number of positive total coliform samples in November. Nitrification also impacts cast iron mains by increased discolored water complaints, very low disinfection residuals, elevated nitrite levels, and inability for flushing to be an effective means for issue resolution.

Mr. Giani noted that current procedures (spot flushing, aggressive unidirectional flushing) have not worked to resolve the issue. Therefore, WASA has taken the additional steps of contacting and working with the Technical Expert Working Group (EPA, DOH, DOE, Washington Aqueduct (WAD), Arlington, Falls Church, and other subject experts) to attempt to find a resolution to this issue. A meeting of the group is scheduled for December 4, 2009 to discuss the issue further. One potential solution that might be carefully evaluated would be to increase the duration of the temporary change in disinfectant to free chlorine.

Dr. Cotruvo noted that the MCL for nitrite is 1 mg/L which is well above the current reported values. He also suggested that it would be appropriate to check the water for nitrosamines formation. *(NB There are other techniques (e.g., chlorite addition) that have been suggested in the literature to suppress nitrite formation by limiting growth of nitrate reducing bacteria. He provided a citation to WASA after the meeting.)*

Mr Giani was requested to provide the Committee with a list of the names and affiliations of those associated with the Technical Expert Working Group. The committee should be kept up to date on any developments and recommended mitigating actions. Also, a request was made to reproduce the legends for the maps within the presentation to make them more intelligible.

III. FIRE HYDRANT PROGRAM

1. Service Status:

Mr. David Wall, Hydrants / Lead Service Replacement Program Manager, reported that the number of public hydrants in the District is 9,092. The current "out-of-service" (OOS) list for fire hydrants stands at 147. Of these, six (6) are categorized "temporarily out-of-service", 18 are categorized as "new construction", 34 are considered "obstructed", and 89 are considered "defective".

Mr. Wall commented that WASA's goal is to go to every hydrant once per year; and to get ahead of the Fire Department and be more in a "preventive maintenance mode". The Committee discussed flow testing and Insurance Services Organization (ISO) testing. WASA was requested that for next month's meeting it provide a clear explanation of what types of flow testing there are (and associated costs) and what the overall long-term plans/goals are in terms of flow testing.

The Committee briefly discussed the importance of making the public aware that less than 1% of the hydrants in the District are deemed "defective." The agenda item concluded with a Committee Member commenting on his appreciation for the 8 ½ x 11 map that depicted the OOS hydrant locations and that it be provided to all BOD members so they would appreciate the geographic distribution.

IV. CDC LEAD STUDY LETTER FOLLOW UP

Mr. David McLaughlin, Acting Director of Engineering and Technical Services, provided the Committee with a status update concerning the CDC Lead Study Letter (September 4, 2009). The CDC provided three (3) recommendations in their letter – 1) filters be provided to customers that have received a lead line replacement, 2) follow-up lead sampling and analysis be conducted at homes that have received a lead line replacement until the lead level is below 15 ppb, 3) continue to keep those addresses that have received a partial LSR in the sample pool for LCR monitoring. WASA Staff is currently working on a proposal to implement these recommendations. The details are still being worked out by WASA Staff; and a plan should be presented during the next Committee Meeting.

The Committee briefly discussed the previous distribution of filters and that the currently stored pitcher filters do not meet the ANSI/NSF standard for particulate lead removal. Possible prioritization of distribution to higher risk groups (locations with very young children and pregnant women and women of childbearing age). The agenda item concluded with a discussion on the CDC Study – whether or not it is currently under peer review and whether or not it would be possible for WASA to receive a draft of the study's conclusions. Dr. Cotruvo noted the importance of WASA working closely with CDC to provide them all requested necessary data to assure that they have all of the data that is available to help them produce the best possible study the first time. It is essential that there not be any data errors in this study that could lead to incorrect results that would need

to be rectified at a later time.

V. LOW IMPACT DEVELOPMENT IMPLEMENTATION PLAN

Due to time constraints, the Committee agreed to move this agenda item to next month's meeting.

VI. LEAD PROGRAM COSTS

Mr. Olu Adebo, Chief Financial Officer, reported to the Committee on the total costs of the LSR Program since its inception. Mr. Adebo cautioned that the 2004 and 2005 costs were estimated because the financial accounting system was not able to separate costs into the individual components/line items at that time. Mr. Adebo estimated that the costs incurred in 2004 and 2005 were between $10-$15 million. Therefore, overall costs of the LSR Program since inception are approximately $150 million. The original lifetime budget of the program was approximately $400 million, which led the Committee to comment that the LSR Program to date had spent less than might have been imagined and WASA should be commended for that aspect. It was also mentioned that accelerated mains replacements would increase the costs for lead services replacements.

VII. ACTION ITEMS – NON-JOINT USE

1. Contract No. 090120 – Flippo Construction Co., Inc.

The Committee agreed to recommend approval.

2. Contract No. 090150 – Fort Myer Construction Corporation

The Committee agreed to recommend approval.

3. Contract No. 090160 – Total Engineering, Inc.

The Committee agreed to recommend approval.

4. Contract No. WAS-07-043-AA-RE – Business Promotion Consultants, Inc.

The Committee agreed to recommend approval.

VIII. EMERGING ISSUES / OTHER BUSINESS

1. Washington Aqueduct (WAD) Disinfectant Change

Mr. Tom Jacobus, General Manager of the Washington Aqueduct (WAD), briefed the Committee that beginning in January 2010, WAD will begin changing their disinfectant from pure chorine (gas) to sodium hypochlorite. Although the costs are greater, this is being

encouraged because of the risks associated with handling chlorine gas. WASA had made the shift of its wastewater disinfection system to hypochlorite after 9/11. Mr. Jacobus noted that this is simply a change in the delivery mechanism, not a chemical change in the disinfecting of the water. Mr. Jacobus also noted that WAD will be adding a caustic soda feed that will allow pH to be adjusted more readily. Overall, neither of these changes should have an effect on the distribution system. Mr. Jacobus noted that WAD has been in contact with EPA and they have approved the changes. EPA has also agreed to take a lead role in public notification related to the changes. WAD is now awaiting the signed, dated letter from EPA confirming their approval. Also, WAD has notified major stakeholders/media of the proposed changes, including U.S. Representative Norton's Office, DC Council, and the Washington Post. Committee Member Bardin requested that WAD also reach out to other local newspapers and the District's Advisory Neighborhood Commissioners (ANCs). In general, direct communications with the public were encouraged for this and other important actions.

IX. ADJOURNMENT

The meeting was adjourned at 11:03 a.m.

Follow Up Items

1. Provide specific, detailed LCR full and partial replacement consequences monitoring data to DDOE and COG so it can be provided to the contractor tasked with the design of the Independent Water Quality Study in order to facilitate his study design.

2. Stay in close contact with the CDC staff preparing the lead study and rapidly provide them all pertinent data so that the study will be as valid as possible.

2. WAD/EPA to include other local newspapers and the District's Advisory Neighborhood Communities (ANCs) in efforts to notify the public of their proposed changes to their disinfectant processes. Also, direct communications with the public were encouraged

3. Provide the Committee with a list of the names and affiliations of those associated with the Technical Expert Working Group that was cited in the Nitrification Analysis Presentation.

4. Reproduce the legends for the maps within the presentation to make them more intelligible, and provide to the Committee.

5. Provide a clear explanation of what types of flow testing there are in relation to fire hydrants (and associated costs) and what the overall long-term plans/goals are in terms of flow testing of fire hydrants.

6. Keep the Committee fully informed on the nitrification problem and options prior to any selection of remediation.