



**District of Columbia  
Water and Sewer Authority**

**Board of Directors  
Environmental Quality and Operations  
Committee Meeting**

Thursday, April 19, 2007, 9:30 a.m.  
Room 407, COF, Blue Plains

**SUMMARY MINUTES**

**Board Members**

David Lake, Acting Chairman  
Brenda Richardson  
Kenneth Davis  
F. Alexis H. Roberson  
Joseph Cotruvo  
Steven McLendon  
Praivi Spoon  
Keith Stone(pending swearing-in)

**Staff Members**

Jerry Johnson, General Manager  
Avis Russell, General Counsel  
John Dunn, Chief Engineer  
Linda R. Manley, Board Secretary

**I. CALL TO ORDER**

David Lake called the meeting to order at 9:35 a.m.

**II. STATUS UPDATES**

1. **BPAWTP Performance**

Average flow at Blue Plains for the month of March was 338 MGD, with average rainfall. Blue Plains treated excess flow of approximately 161 MG through primary treatment, disinfection, and dechlorination due to wet weather events. The plant met all permit parameters. Biosolids production was 1,414 tons per day, and effluent total nitrogen for the month was 9.05 mg/L vs. a permitted annual goal of 7.5 mg/L.

2. **Status AWTP NPDES Permit**

The new NPDES Permit was issued April 5, including the 4.2 mg/L nitrogen limit. WASA must file appeal, if appropriate, by May 6.

A Committee member asked about the reduction in nitrogen discharge from the plant between 2000 and 2007 as reflected in the chart on page 3 of the handout. What was the cause of the dramatic reduction?

Warmer weather and lower flows have contributed to this; however, the WASA staff is continually striving to optimize our process and control to maintain the lowest discharge possible with WASA's existing process and equipment.

### III. WATER SERVICE PROGRAM

1. Coliform Testing

WASA has had two positive samples in March, and none to date in April. The two positive samples were the result of two water main breaks. The trigger level for WASA public notification is 5%, or 10 positive samples of the 210 samples WASA is required to take. October 2004 was the last time that WASA was required to notify customers of positive samples.

2. Orthophosphate Addition/OCCT

Orthophosphate addition is continuing with no adverse impacts.

3. LCR Compliance Testing: Report and Review Status

WASA has completed two rounds of samples, for a total of 62 of the required 100 samples required for the semester. Of these, four have exceeded 15 ppb. All of those exceeding that level were from lead services that also had galvanized household lines, and all were substantially above 15 ppb. Another round of sampling materials will be distributed next week. WASA is planning a test program to investigate the correlation with the galvanized house piping.

WASA has completed four full semesters below the action level (i.e., 90% of samples below the action level).

EPA will require WASA to complete at least one semester of sampling with results below the action level, after the chlorine 'burn,' before relaxing the sampling requirement. At the earliest, this would be the start of next year.

WASA is continuing to run both test loops and profiling of the system, within the water service line, where WASA actually 'walk the flow' through the household piping, taking samples at various locations. During the 'walk through' WASA created a water hammer to the system to see if scale, including the protective layer that is being built, will break off. It was found that the system is becoming more stable over time.

4. Chlorine "Burn"

WASA began the chlorine 'burn' on April 7. We have received a few calls with complaints, mostly about chlorine odor, and have responded by flushing the system in the areas. After flushing, we have had no repeat calls.

### IV. TN/WW – BLUE PLAINS STRATEGIC PLANNING: QUARTERLY REPORT

1. Status AWTP NPDES Permit

The new NPDES Permit was issued April 5<sup>th</sup>, however, the new TN requirement will not go into effect for 60-days, on June 5<sup>th</sup>. On the 16<sup>th</sup>, WASA submitted comments to EPA on the permit. It was noted that WASA does not currently have the facilities necessary to meet the new TN permit limit. Therefore, the next step will be to negotiate modifications to the LTCP Consent Decree to set a date for WASA compliance with the TN limit. WASA expects that modifications to the Consent Decree will be issued prior to June 5, 2007.

## 2. Permit and Consent Decree Amendment Process and Schedule

WASA has begun negotiations of a plan and schedule to achieve compliance with new TN permit limit, and in fact believe it has essentially reached accord with USEPA on a plan and schedule. This plan was sent, in draft, to EPA on 4/13/07 for review and comment, and for discussion with the 'public.' The draft plan will be transmitted to the BOD.

On May 4<sup>th</sup>, WASA will meet with environmental groups and members of regulatory agencies in the District, Maryland, and Virginia to enlist support for WASA's proposal. Subsequently WASA will arrange for additional public meetings this summer.

The Committee asked that the Neighborhood Advisory Committees be invited to these meetings.

The Committee asked what was WASA's percentage contribution of nitrogen to the Chesapeake Bay. The nitrogen going into the Bay is about 1/3 from point sources, 1/3 from the air, and 1/3 from runoff. However, as the single largest point source, WASA has become very visible and accordingly is the focus of the environmental groups and the EPA in the Chesapeake Bay region.

## V. **DIGESTER PROJECT STATUS REPORT**

A PowerPoint presentation was made on the Biosolids Management Program and the status of the EDF project. This presentation was to fulfill management's commitment to report to the BOD twice a year the status of the biosolids program, and the digester project.

After analyzing construction material prices and the national and local bidding environment, there is no reason to expect that if the EDF project were bid again at this time there would be a lower bid price. WASA's biosolids land application program is still viable and cost effective; however, continuing concern by a very vocal minority and anti-biosolids groups could impact the long-term viability of the program. It may be in WASA's best interest to have a plan, perhaps for producing a Class A product, as protection against the potential for legislative actions in response to negative public opinion. WASA is continuing to investigate evolving technologies for digestion that could produce this Class A product, and options other than land application of Class B Biosolids.

The existing biosolids processing system requires renewed attention since the digesters will not be in place by 2009 as planned. Thus, the planned 50% reductions in biosolids has not happened. WASA must repair equipment more quickly, increase the reliability of the system, and eliminate bottlenecks and assure adequate capacity.

A presentation will be made at the September EQ&Op's meeting to describe the technology screening process, provide descriptions of viable options, and provide an update on potential biosolids markets.

The Committee asked what premium WASA was seeing from the use of egg shaped digesters as opposed to using conventional digesters. Blue Plains has severe limitations on available site space, and, therefore, conventional large diameter, shallow digesters could not be built. Silo digesters could be constructed, but at a cost of approximately 20-30% less than the egg shaped digesters: still considerably more than our budget.

The Committee noted that DC's flow to Blue Plains, which includes combined sewers, most probably has fewer solids per volume flow than that from other jurisdictions. Is WASA able to measure the solids content of the flows, and shouldn't the other jurisdictions pay a higher percentage of the solids management system?

The cost shares for Blue Plains O&M costs are established in the IMA, and are currently based only on flow volume. WASA has some preliminary data that suggests that the solids content of the DC flows are less than that of the flows from other jurisdictions, but does not currently measure this. These are actually questions to be brought up in the current IMA discussions, and are not an issue for WASA, directly, to resolve.

## **VI. ON-SITE GENERATION OF SODIUM HYPOCHLORITE**

A Preliminary Analysis of producing sodium hypochlorite onsite was provided to the Committee, which also addressed the use of bromine as opposed to chlorine as a disinfectant.

The Preliminary Analysis suggests that there are potential savings in the onsite generation of sodium hypochlorite, with a potential payback in as little as 1.5 - to 3 - years. The staff will continue to study this potential, with a full report in July, and have the results available for consideration in the next budget.

The Preliminary Analysis suggests that there are environmental disadvantages in using bromine as a disinfectant, and suggests discontinuing the investigation of this alternative.

The Committee pointed out that there are advantages to the use of bromine as a disinfectant, especially when used where nitrogen is present, and asked that the staff look further into this alternative.

## **VII. WATER: PURCHASED AND SOLD QUANTITIES**

A PowerPoint presentation was made on quantities of water purchased vs. water sold. The presentation addressed reasons for the unaccounted for water, and what WASA is doing to track the water that is not sold. The presentation illustrated that WASA is continuing to improve the accountability for this unsold water and track where it is being used.

The Committee inquired as to the methodology being used to investigate and report water use accounting. Staff will propose using the AWWA recommended program and will report on same in the future.

## **VIII. WATER METER REPLACEMENT PROJECT**

A PowerPoint presentation was made on the water meter replacement project. The presentation covered the status of the three phases of the project: residential services, small commercial services, and large commercial services. The presentation also pointed out that there are 34 large meters deferred indefinitely because of asbestos, access to the site, etc.

A problem has developed with installation of compound meters (3- to 8-inches) used where facilities have widely varying demands. The changeover valve that enables the smaller meter to register low flows has stopped functioning. AMCO, the meter manufacturer, is investigating the problem to identify the root cause and the suggested solution. WASA has stopped installation of the compound meters until the cause is identified and a solution is agreed upon. Because of this, the original completion date for the program, July 31, 2007, has been pushed back 90-days pending a successful resolution of this issue.

The Committee asked if other metering technology was being investigated, e.g. non-mechanical. The only non-mechanical metering technology is the mag-meter, which requires a power source, UL and FM certifications, etc. This is not feasible for WASA. There is a single jet meter that has only one moving part, but they are considerably more expensive.

## IX. ACTION ITEMS

The following contracts were submitted for Committee action:

<b>Contracts Considered and Approved</b>				
<b>No.</b>	<b>Type</b>	<b>Prime Contractor</b>	<b>Scope</b>	<b>Amount</b>
<b>Joint Use</b>				
WSA-01-044-AA-MB	Goods & Services	Ideal Electrical Supply Corp.	Contract Modification	\$84,000.00
WSA-01-041-AA-MB	Goods & Services	M.C. Dean, Inc.	Contract Modification	\$325,000.00
<b>Non-Joint Use</b>				
040270	Construction	Anchor Construction Company, Inc.	Second Option Year	\$2,000,000.00
040260	Construction	Anchor Construction Company, Inc.	Second Option Year	\$2,000,000.00
DCFA #392-WSA	Engineering Services	Bryant Associates, Inc.	Supplemental Agreement	\$1,909,000.00

WASA staff informed the Committee that the value of contract WSA-01-041-AA-MB, M.C. Dean, Inc. may be modified, and therefore the Committee agreed to, after revisions, forwarding this contract to the Board with no recommendation from the Committee.

The Committee requested that more information be added to the Fact Sheet for contract DCFA #392-WSA. They requested that the reason for this SA be added, as well as the duration of the SA, and what will occur next in the management of the LSR program.

With the exception of the above, all Fact Sheets were unanimously recommended by for approval.

## X. EMERGING ISSUES

A handout was provided to the Committee addressing legal issues. These will be discussed only by the full Board, and only in Executive Session.

A Redundancy Study has been performed by COG through a Security Grant, and has been passed to WASA for review and comment. This study includes items such as water system interconnections, backup power tie-in for pumping, etc. The WASA staff is currently reviewing this for technical feasibility, and will provide an executive summary of the study at a future Committee meeting. The Committee asked that any issues of major significance be brought to their attention immediately as they are discovered.

## XI. OTHER BUSINESS

No Other Business was presented.

## **XII. ADJOURNMENT**

Mr. Lake adjourned the meeting at 12:01 p.m.