



*District of Columbia  
Water and Sewer Authority*

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

Thursday, February, 15, 2007, 9:30 a.m.  
Room 407, COF, Blue Plains

**SUMMARY MINUTES**

**Board Members**

David Lake, Acting Chairman  
David J. Bardin  
F. Alexis H. Roberson  
Howard C. Gibbs  
Kenneth Davis  
Joseph Cotruvo  
Paivi Spoon

**Staff Members**

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

**I. CALL TO ORDER**

David Lake called the meeting to order at 9:37 a.m.

**II. STATUS UPDATES**

1. **BPAWTP Performance**

Average flow at Blue Plains for the month of March was 307 MGD, with below average rainfall. Excess flow of approximately 21 million gallons due to wet weather events was treated through primary treatment, disinfection, and dechlorination. All permit parameters were met. Biosolids production was 1,331 tons per day, and effluent total nitrogen for the month was 6.31 mg/L vs. a permitted annual goal of 7.5 mg/L.

The Committee requested that on the Greenhouse Gas Balance chart, "MT" be spelled out as Metric Tons.

There was discussion concerning the deammonification research work reported in the BPAWTP Report. The Committee asked how well developed the research was that was included in the handout. It was noted that the research is fairly well developed at this time, and is being used in approximately 10 plants worldwide. In particular, Alexandria, Virginia, and New York City are committed to this, but the process is only useful at plants having a digestion process.

The Committee then asked about the plan for a 6-month review of the status of the digester project. The review will address alternate technologies, including alternate methods of digestion. A status report and presentation will be presented at the March Committee Meeting.

2. Status AWTP NPDES Permit / EPA Meeting

DCWASA continues in negotiations with EPA on both the reopening of the NPDES Permit to add an enforceable limit for nitrogen removal, and on the TMDL process. Next step is a discussion between DCWASA GM and EPA Region III Water Division Director, Jon Capacassa, now scheduled for next week. The BOD will be kept apprised of developments concerning these issues.

**III. WATER SERVICE PROGRAM**

1. Coliform Testing

WASA had no positive sample results in January, or to-date in February.

2. Orthophosphate Addition/OCCT

Orthophosphate addition continues at reduced levels with good results: Water chemistry remains stable. DCWASA continues to actively participate in a water quality technical advisory group (initially established by USEPA) with USEPA and WASA, and the other WAD customers. All process and treatment decisions made with regard to Optimum Corrosion Control Technology are undertaken upon concurrence of this advisory group. We currently are continuing discussions in this advisory group concerning whether to conduct a free chlorine "burn" this spring. EPA has stated that they are not taking a stand on one side or the other on using a chlorine burn. There is no consensus, among water quality professionals – either locally or nationally on the value of and/or necessity for an annual "burn". Nation-wide, approximately 50% of the systems perform chlorine burns annually. WASA has not conducted a "burn" for the past 2 years. Our current plan is to not conduct a "burn" this year. Logistically it may not be possible to get a burn done this spring even if a decision is eventually made to conduct a burn.

The Committee asked whether, under the Lead and Copper Rules or under health and safety regulations, EPA could legally require WASA to perform a chlorine burn.

As background, prior to WASA, DC had numerous high visibility poor water quality issues. Since WASA's creation, we have performed many actions that have improved our water quality record. WASA has eliminated cross-connections, and dead ends. We have initiated an annual unidirectional flushing program. EPA is aware that water quality is a full program, and not just chemical addition.

The Committee requested that full information on this issue be provided to the Committee members prior to the next meeting.

3. LCR Compliance Testing: Results and Trends

EPA has denied WASA's request to initiate a reduced the monitoring program; therefore, WASA will continue a full sampling program of 6-month semesters with 100 samples per semester.

The EPA decision has somehow linked the reduced sampling approval to a full chlorine burn on the system, followed by two semesters of satisfactory test results. WASA will continue discussions with EPA on this linkage to better understand EPA's attempt. Nonetheless, with EPA's current position, DCWASA must continue with the full sampling program at least thru calendar 2008, and perhaps 2009.

The raw data on the DC schools testing program was publicized after a freedom of information request was filed with the District of Columbia Public School system (DCPS), and was subsequently provided to the media. This water testing program is being conducted by the DCPS, with coordination between the DCDOE and DCDOH. WASA is not a party to this program, and has no lead service lines serving school buildings. WASA is not sure of the protocol that is being used by DCPS and there appears to be a lot of noise in the data. For instance, it appears that there is not a consistency in the time that the water is standing in the pipes prior to testing. WASA has offered technical support to help the school system develop an acceptable protocol and in coordination with EPA.

The Committee cautioned WASA on appearing to lead this effort for two reasons: 1) it could create the appearance to the public that WASA is responsible for the lead in the water; and, 2) this is not a WASA problem, and we should be judicious in spending rate-payers money to help solve it. The General Manager emphasized that WASA would, assure the public that lead in school water was not the fault of the WASA water supply nor is it WASA's responsibility to correct the problem.

#### **IV. CASEY TREE FOUNDATION: "EVALUATION OF SELECTED GREEN TECHNOLOGY FOR WET-WEATHER POLLUTION CONTROL"**

Barbara Deutsch of the Casey Tree Foundation made a PowerPoint presentation on a study of green technology for wet weather pollution control. This project was initiated by Casey Tree Foundation under a \$200,000 grant from EPA, and performed with Limmo Tech, Inc. as a partner. WASA allowed Casey Tree and Limno Tech to use the LTCP model as a major tool in their study work.

The research addressed the contribution that green roofs and urban trees could contribute to the reduction of storm water pollution in the surrounding streams and rivers. Generally, a green roof will hold approximately 1" of rainfall, and a tree will hold approximately 1/10". Neither of these will make much of a contribution to reducing number of CSO events, but they will contribute to reducing the CSO volume, and 85% of rain events are 1" or less.

The main recommendations developed from the study are:

- ◆ Develop a fee for storm water runoff, combined with credits and incentives.
- ◆ Develop objectives for storm water reduction.
- ◆ Provide a goal for parking lot coverage of 40%.
- ◆ Increase tree box size from 3' X 5' to 6' X 20'.

The following tasks for the project are remaining:

- ◆ Developing the optimum savings from these measures.
- ◆ Developing pollutions load savings calculations.
- ◆ Developing the final project documentation.
- ◆ Developing a mini-model to be used on individual projects.

The Committee asked what WASA could contribute to finalizing the project. Casey asked that WASA provide operations costs to be used in calculating savings, and provide technical assistance in what the requirements are to conduct storm water to the tree boxes.

The General Manager stated that he would have Dr. Siddique review this information, and report on its implications to the LTCP. Also, since EPA has indicated a high level of interest in this project and its application to urban areas on a National scale, the General Manager and staff will work with EPA at a national level to develop acceptance of predicted LID performance as being allowable off sets to conventional stormwater and combined sewage storage facilities and other stormwater and combine sewer system control strategies. Staff will specifically explore with EPA the potential for modification of WASA's LTCP Consent Decree.

The Committee requested the following:

- ◆ A presentation of the modification of tree boxes within 2-months, including WASA's view of the modifications and DDOT' view.
- ◆ An opinion from the General Manager on whether WASA should provide funding support for studies such as this on other LID technology.
- ◆ Provide these handouts to all BOD members.
- ◆ Provide a copy of the final report to all BOD members.

The Committee asked about the progress of discussions with EPA on nitrification reduction/wet weather issues. The General Manager will participate in a telephone call with EPA next week to continue these discussions, and the staff is continuing to work on modifications to the Consent Decree on these issues.

## **V. PROCUREMENT AT WASA**

A PowerPoint presentation was made covering WASA's procurement procedures, including a brief review of the procedures in effect with WASA's predecessor agency (DPW) while under the DC Government procurement regulations.

The Committee noted that the *Procurement Procedures*, distributed at the meeting, did not show the date of adoption. They requested that in the future we show that date on the document.

There was a discussion of WASA's MBE/WBE and LSDBE programs and participation. The Committee requested that staff provide, on a monthly basis, the actual performance in spending under the MBE/WBE and LSDBE programs. The General Manger will take the request under advisement and respond at the next meeting.

The Committee also asked about procurement using GSA, COG, and credit cards. The Committee asked that staff provide the percentages of spending under each of the methods of procurement. The Committee asked whether WASA used the GSA schedule for procuring engineering services: WASA does not.

The Committee requested that the flow chart for construction contracts be revised per discussion and questions submitted.(i.e. simplified).

The Committee stated that they would forward questions raised by the presentation, and asked that the staff revise the presentation to address the questions and make the presentation again. The Committee asked that the presentation be process oriented, addressing what, where, when, and how.

## **VI. GEORGETOWN SINK HOLES**

Sinkholes in the Georgetown area were reported to WASA in the fall of 2005. After a preliminary investigation, WASA determined that the cause of the sinkholes in 13 distinct locations was localized failure of the combined sewers in the area.

The sewers in this area (Combined Sewer Outfalls CSO 050 and CSO 052) were generally installed between 1880 and 1900 using short lengths of bell-and-socket terra cotta clay pipe. The sewer shed areas are served by approximately 51,400 linear feet of sewer ( $\approx 15,600$  in CSO 050, and  $\approx 35,800$  in CSO 052).

After a thorough investigation using a Closed Circuit Television sewer camera (CCTV), it was determined that the failures were a combination of collapsed pipe and joint failures. The collapsed pipe failures will require open-cut to replace failed sections of pipe: this consists of only approximately 125 linear feet,  $\approx 0.2\%$  of the sewer shed. The joint failures are generally caused by deterioration of the oakum-pack gasket, resulting in the socket falling to the bottom of the bell, creating an annular opening at the top of the bell. This can be repaired by using cured-in-place lining (Cured In Place Pipe – CIPP) which is inserted from manhole to manhole, and filled with hot water which holds it tight to the inside of the pipe and cures the CIPP polymer resin. After curing, holes for connecting building sewer laterals are cut from within the pipe, avoiding all surface excavation. CIPP will be used to repair approximately 2,800 linear feet of sewer,  $\approx 5.4\%$  of the sewer system. After the pipe repairs are completed, surface reparation of the subsided areas will be performed.

Final Bidding Documents are expected to be completed by February 23, 2007 and construction to be started in August of 2007. Construction should be completed in August of 2008.

The Committee asked why only these areas were being repaired when all of the sewers in the area have similar construction and future, similar failures should be expected. Why are we not lining additional sections to avoid failures prior to their occurrence?

In response it was noted that the total length of sewer pipe to be repaired is less than 6% of the sewer length in the sewer shed. WASA cannot anticipate where future failures will occur, and it would be cost-prohibitive to reline the entire sewer shed areas lines. WASA will be prepared to react quickly to future failures. WASA is also completing a Sewer Assessment program for all sewers in the city that will prioritize sewer repairs for all areas of the city, including these areas.

The Committee asked what percentage of the sewer system was inspected by CCTV: answer, it was  $\approx 3\%$ . Committee member Spoon asked the General Manager to provide her with a copy of the briefing materials for the Sewer Assessment Program. The Committee asked that they be provided with the criteria for sewers selected for CCTV inspection within the Sewer Assessment Program and the percentage of terra cotta pipe in the city that was inspected by CCTV.

## **VII. REVIEW OF DRY WEATHER OVERFLOW**

### **1. Potomac Pumping Station Overflow (Dry Weather Discharge) Incident 2/07**

A PowerPoint presentation was made showing the pumping station configuration and the actions taken, in a timeline series. It was noted that the presentation was based on a preliminary investigation of the incident. The presentation showed active and inactive pumps, and open and closed gates. The illustrations show that gates were closed in such a manner that precluded flow to operational pumps: An operator error. This was not discovered until alarms sounded from activation of inflatable dams being activated to release the backup in the sewers influent to the station. The operator and maintenance crew at the site failed to notify management of the actions being taken. Likely management would have foreseen the implications of the proposed actions that subsequently caused the overflow.

Because of this, retraining of all operators is in progress, and some maintenance on pumping stations has been accelerated.

2. Public Notification Protocols

A complete presentation on public notification will be made next month.

**VIII. 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>				
WAS-02-021-AA-LW	Goods & Services	First Vehicle Services	Contract Modification	\$150,000.00
WAS-04-053-AA-MB	Goods & Services	J. Givoo Consultants, Inc.	Second Option Year	\$1,024,460.00
WAS-04-001-AA-MB	Goods & Services	M & M Electric Motor Repair, Inc.	Third Option Year	\$630,000.00

The Committee questioned the award of Contract 060050 for not-to-exceed \$7 million when the low bid was \$4,213,100. It was explained that the bids were used to establish unit prices for the various items of work where true quantities will not be known until work is in process, and the Contract amount would allow the contract to proceed without the necessity of Change Orders as true quantities are established. The Committee requested that a full Bid Tabulation be attached to contracts of this type in the future.

The three joint-use action items were unanimously recommended by the Committee for approval.

<b>Non-Joint Use</b>				
WAS-06-014-AA-VW	Goods & Services	Welchs utility Services	First Option Year	\$1,520,025.00
060050	Construction	Capitol Paving of DC, Inc.	Contract	\$7,000,000.00

The District members recommended approval of the two non-joint use action items and asked that further information on Contract No. 060050 be provided prior to the Board's approval.

**IX. EMERGING ISSUES**

The Committee asked about the progress in hiring a Procurement Director. Five interviews are set for February 16th. Two offers have been made from past interviews, and both candidates declined.

A Committee member pointed out an article in today's edition of the Washington Post regarding the DC Government procurement processes. It was recommended that the Committee compare the practices noted in the article with WASA's procurement process.

A Committee member asked that in the Quarterly CIP Report, on the page summarizing Lead Service Replacements, a footer be added that contained: linear feet of public space replaced, linear feet of private service replaced, linear feet of private service not replaced, a total for all of these, and percentages for each of these.

The Committee asked about the City Council hearing on 2/14/07 concerning last year's performance. The hearing was not held, but will be rescheduled.

**IX. OTHER BUSINESS**

No Other Business was presented.

**X. ADJOURNMENT**

Mr. Lake adjourned the meeting at 1:03 p.m.