



**District of Columbia  
Water and Sewer Authority**

**Board of Directors**

**Environmental Quality and Sewerage  
Services Committee**

*Thursday, January 21, 2016*

*9:30 a.m.*

**MEETING MINUTES**

**Committee Members via Conference Call**

James Patteson, Chairperson  
Howard Gibbs  
Bo Menkiti

**DC Water Staff Present**

George Hawkins, CEO and General Manager  
Len Benson, Chief Engineer  
Gregory Hope, Principal Counsel  
Linda Manley, Secretary to the Board

**I. Call to Order**

Mr. Patteson, Chairperson, via conference call called the meeting to order at 9:38 AM.

**II. AWTP STATUS UPDATES**

**1. BPAWTP Performance**

Mr. Aklile Tesfaye, Assistant General Manager for Wastewater Treatment, reported that the monthly-average influent flow was 283 MGD. 4.84-inches of precipitation fell during the December reporting period. The enhanced nitrogen removal facility is performing well, producing a low total nitrogen (TN) concentration of 2.08 mg/l. Mr. Tesfaye noted that December 31, 2015 signified a full year since the January 1, 2015 EPA-mandated effluent TN limit with a cumulative discharged TN of 2.7 million pounds, which is well below the permit effluent limit of 4,377,580 pounds per year. Overall, plant performance was excellent with 100% permit compliance. Biosolids production was 452 wet tons per day (wtpd).

Mr. Tesfaye remarked that the Combined Heat and Power (CHP) facility continues to operate in the commissioning phase with all systems in service undergoing testing and optimization. The average energy generated from CHP was 195 MWH/day or 32% of the 606 MWH/day Blue Plains energy demand as depicted in the revised Blue Plains monthly energy consumption chart. The Committee asked whether the energy generated from the CHP facility should start to level off now that the facility is generating the projected goal of approximately 30% of the average Blue Plains energy demands. Mr. Tesfaye responded that current energy generation is positive; however, the CHP facility is still in the optimization phase and stated that an update will provided to the Committee after the testing and data analysis have been completed.

### III. NPDES RENEWAL STATUS UPDATE

Mr. Tesfaye explained that there are a total of fourteen (14) requested NPDES permit revisions; however, only three significant items (as shown in slide 5): Classification of Outfall 001, Design capacity of Blue Plains Outfall 002, and E. coli TMDL, which are being presented at the status update. Mr. Tesfaye explained that the new system configuration after the Tunnel Pumping Station and Wet-Weather Treatment Facility are constructed in year 2018 DC Water is requesting that to re-classify Outfall 001 as a separate CSO outfall as depicted in slide 6. Mr. Tesfaye highlighted several advantages as outlined in slide 7 for the re-classification of Outfall 001 as a CSO. Mr. Tesfaye explained that the design capacity for Blue Plains is requested to be revised from 370 MGD to 384 MGD due to the quantification of additional stormwater flow to be treated at Blue Plains as a result of the tunnel system (slide 9), which was not included in the 1984 Blue Plains Feasibility Study that established the 370 MGD design capacity for the plant. Mr. Tesfaye explained DC Water is appealing the Blue Plains E. coli loading allocation under EPA's new TMDL for E. coli for the Potomac River (slide 10). Mr. Tesfaye noted that EPA is reviewing the requested permit revisions and the permit issuance may be affected by the E. coli TMDL appeal (slide 11).

### IV. NORTHEAST BOUNDARY DESIGN-BUILD PROJECT UPDATE

Mr. Carlton Ray, Director Clean Rivers, provided a background summary consisting of the 2012 severe flood event pictures in the Bloomingdale and LeDroit Park neighborhoods (slide 2) and described the Mayor's Flood Prevention Task Force that resulted in over 25 recommendations and more specifically the engineering measures for short-term, medium-term and long-term flood mitigation solutions (slides 3-4).

Mr. Ray explained that the medium-term flood mitigation projects consisting of the Irving Street Green Infrastructure and McMillan Stormwater Storage projects were completed in spring 2014, and the mining for the First Street Tunnel Project was completed on December 23, 2015. Mr. Ray noted that the long-term solution consists of constructing the Northeast Boundary Tunnel (NEBT) Project, which has a consent decree requirement for operation by March 2025. However, DC Water has established a target operation date of December 2022 based on the Mayor's task force recommendations. Mr. Ray highlighted many of the project benefits and noted that the NEBT is expected to reduce CSO to the Anacostia River by 98% (slide 5). Mr. Ray explained that the NEBT alignment has been adjusted to minimize private property acquisitions and noted that all properties and easements on the alignment have been obtained. Mr. Ray explained that the NEBT construction was divided into phases: Division U first, which will result in the relocation of the utilities at the eleven (11) shaft locations and staging areas as depicted on slide 6; and Division J, which will result in the construction of the NEBT and diversion facilities (slide 7).

Mr. Ray explained that the NEBT is the largest project that the Clean Rivers Project has undertaken and will consist of approximately 27,000 linear feet of 23-foot diameter tunnel including diversion chambers, deep shafts, adits, and underground connections (slide 8). Mr. Ray stated that DC. Water would meet or exceed the MBE/WBE goals on this project.

Mr. Ray introduced Mr. Moussa Wone, Manager Tunnel Design, who provided an overview of a typical diversion facility. Mr. Wone described the process of conveying flows from near-surface sewer structures to deep structures by way of a drop shaft to an adit that connects the shaft to the tunnel as illustrated in slide 10. Mr. Wone provided an example of the diversion facility planned at the Rhode Island Avenue site and Mr. Wone noted that the diversion facility will

typically include some ground/street level improvements and drop shafts that are generally visible from above grade. Mr. Wone explained that the majority of the construction is done below grade (slides 11-15).

Mr. Ray presented the next steps on the project by indicating that the proposed Division U contract is expected to be presented in the March 2016 Committee Meeting for a planned construction NTP of April 2016. Division J has a planned construction NTP of April 2017 (slide 17).

**V. ACTION ITEM - JOINT USE**

1. Contract No. WAS-12-066-AA-RE, Polydyne, Inc.
2. Contract No. WAS-11-049-AA-GA, Electric Motor and Contracting Co., Inc.

The Committee reviewed the two action items while the conference call connection was being re-established and will recommend the two actions to the full Board. The additional Committee members concurred with his recommendation.

**ACTION ITEM – NON JOINT USE**

1. None

**VI. OTHER BUSINESS/EMERGING ISSUES**

None.

**VII. EXECUTIVE SESSION**

An executive session was not held.

**VIII. ADJOURNMENT**

The meeting was adjourned at 10:36am.

**Follow-up Items**

1. Mr. Aklile Tesfaye will provide an update after the CHP optimization and data analysis are completed to report if the project goal of 30% average energy generation was achieved.