BOARD OF THE METROPOLITAN SEWERAGE DISTRICT MARCH 21, 2007

1. Call to Order and Roll Call:

The regular monthly meeting of the Metropolitan Sewerage District Board was held in the Boardroom of MSD's Administration Building at 2:00 PM on Wednesday, March 21, 2007. Chairman Aceto presided with the following members present: Bellamy, Bissette, Bryson, Creighton, Gantt, Haner, Kelly, Newman, VeHaun and Venable. Mr. Sobol was absent.

Others present were: Thomas E. Hartye, General Manager, William Clarke, General Counsel, Gary McGill with McGill Associates, Leah Karpen with the League of Women Voters, Joseph Martin with Woodfin Sanitary Water & Sewer District, Josh Norton and Richard Tsang with CDM, Stan Boyd, Martha Zeigler, Ed Bradford, John Kiviniemi, Peter Weed, Ken Stines, Dennis Lance, Jim Naber, Julie Willingham and Sondra Honeycutt, MSD.

2. Inquiry as to Conflict of Interest:

Mr. Aceto asked if there were any conflicts of interest with the agenda items. Mr. Kelly and Ms. Bellamy asked to be excused from voting on item 7.a. of the Consolidated Motion Agenda. Mr. Aceto excused Mr. Kelly and Ms. Bellamy from voting on this item. No other conflicts were reported.

3. Approval of Minutes of the February 21, 2007 Meeting.

Mr. Aceto asked if there were any objections to adopting the minutes of the February 21, 2007 meeting as presented. With no objection, the minutes were adopted by acclamation.

4. Discussion and Adjustment of Agenda:

None

5. Informal Discussion and Public Comment:

Mr. Aceto welcomed Ms. Karpen, Mr. Norton and Mr. Tsang.

Ms. Karpen asked what MSD's reaction was to the announcement that the City of Asheville approved \$2.5 million for the expansion of Biltmore Town Park and if there is adequate sewer there. Mr. Hartye stated that there is adequate sewer, but there was no comment by MSD on the City's incentive grant. Ms. Bellamy reported that the Asheville City Council approved the economic development incentive grant this week, however, the project had already been approved. She stated that part of the approval process is to go through the Technical Review Committee, which MSD is part of, and that all of the requirements for MSD were met prior to approval.

6. Report of General Manager:

Mr. Hartye congratulated the entire staff for another successful external ISO 14001 Audit and thanked the Employee Advisory Committee and Martha Zeigler for their work on reworking the employee health plan to address increased claims. In addition, he congratulated Julie Willingham for passing her Certified Local Government Purchasing Officer (CLGPO) examination.

Mr. Hartye presented an article from the Asheville Citizen Times on MSD's Sewer Extension Policy.

Mr. Hartye presented a survey of the City of Asheville, Buncombe County, Charlotte Utilities and OWASA regarding the effectiveness and cost of providing laptop computers for the Board. Mr. Aceto asked the Board how and when they would like to address this issue. Mr. Venable stated that based on the survey, he is satisfied that the idea of laptops does not need to be carried forward. Ms. Bryson agreed. Mr. Aceto expressed his appreciation to staff for gathering the information and tabled the issue to possibly be looked at again in the future.

Regarding meeting dates, Mr. Hartye reported that the Personnel Committee will meet Monday, March 26th at 8:30AM and that the Right of Way Committee meeting scheduled for March 28th was rescheduled to April 4th at 2PM. He further reported that the CIP Committee will meet April 5th at 8:30AM and the next Regular Board Meeting will be held April 18th at 2PM. Mr. Aceto reported that a Board Retreat was held prior to today's regular meeting to discuss planning issues for the coming year and that a list of planning issues from the meeting will be forwarded to each member for input on items that are of primary concern.

7. Consolidated Motion Agenda:

a. Consideration of Developer Constructed Sewer Systems – White Oak Park, Woodland Avenue, Leicester Village and Cadys Court:

Mr. Hartye reported that staff recommends acceptance of the Developer Constructed Sewer Systems and that all MSD requirements have been met.

b. Cash Commitment/Investment Report – Month ended January 31, 2007:

Presented as information only.

Regarding Item 7 a. (Leicester Village), Mr. Haner asked if the District will own the pump station. Mr. Boyd said yes. Mr. Hartye stated that the pump station maintenance fee is a requirement of the extension policy, which is for the 20-year present worth cost of operating and maintaining the pump station. Mr. Venable asked if the pump station maintenance fee was prior to MSD's latest policy on pump stations. Mr. Hartye stated that the most recent change is that MSD does not allow pump stations except under extraordinary circumstances, but the maintenance fee has been in there for quite some time. Mr. Boyd stated that this pump station is beyond the limits of MSD's gravity system and there is no way to connect by gravity.

Mr. Bissette moved that the Board approve the Consolidated Motion Agenda as presented. Mr. Gantt seconded the motion. Mr. Aceto called for discussion and noted that Mr. Kelly and Ms. Bellamy are excused from voting. With no discussion, roll call vote was as follows: 9 Ayes; 0 Nays.

8. Presentation – Treatment Plant Facilities Plan:

Mr. Hartye reported that with the help of staff and Gary McGill, CDM performed a Facilities Plan, which is a detailed document that assesses the condition, performance, and future needs of the various unit processes and equipment within the treatment plant. He stated that Mr. Tsang and Mr. McGill will give a Power Point presentation on the Plan.

Mr. Tsang expressed his appreciation to the Board for an opportunity to report on some of the work that has been done on the Facilities Plan. He stated that the overall objective of the plan is to identify short term, medium term and long term needs of the Water Reclamation Facility (WRF). He stated that the facilities plan report is a result of

the process evaluation of the WRF, including a detailed capacity evaluation of the RBC's. Also, the report includes a physical facilities evaluation.

Regarding the Process Evaluation, Mr. Tsang reported that the first thing they did was look at the whole plant process; capacity; is it the right process; is it performing as expected, if not, what is the problem; is it mechanical issues or other things. He stated that in looking at the process they looked at the flows and loads; not just how much water is coming in, but what is in the water as well. He presented a table from the 2001 Master Plan showing flow projections of 33.4mgd. He stated that because of revisions due to a decrease in industrial flow, the projected wastewater flow in the year 2020 is expected to be 31.3mgd, which is still within the plant's capacity.

Mr. Tsang presented a process flow schematic along with an aerial photo. In addition he presented a schematic of the three (3) RBC basins at the plant, which consist of 152 units, some of which are 20 years old. He stated that there are eight (8) RBC's that are broken or stopped which need to be repaired or replaced. Mr. Tsang reported that as a result of this evaluation the following was found:

- Plant capacity is adequate
- Anticipated future flow is @ 31.3mgd
- Broken or failed RBC's should be replaced
- More clarification capacity is needed
- Secondary microscreens need to be replaced

Mr. Tsang reported that the Physical Facility Assessment includes looking at the pumps and drives on all of the equipment to determine the conditions the equipment is under and making recommendations. In addition, the evaluation includes a description and history of each facility, a summary of operation and performance, a description of maintenance, and recommendations for future service for the specific processes and facilities. Mr. Tsang touched on recommendations for the short term (2-5 years), the medium term (5-7 years) and long term (7+ years) Mr. Haner asked for a clarification on the capacity of the plant. Mr. Tsang explained that they currently use the historic plant loading (BOD) of 40mgd, but now the loading is higher, so the RBC process can treat 31.3mgd. Mr. Haner asked if the Infiltration & Inflow (I&I) elimination program reduced the 8mgd wet weather flow. Mr. Kiviniemi stated that MSD has seen quite a difference during rain events, where the influent flow does not go as high as it did in the past and does not stay up for a prolonged period of time, which is all predicated on the degree of the rain storm event. Mr. Haner asked if the 8mgd rate is a reasonable number. Mr. Hartye reported that the 8mgd rate was the annual average I&I. He stated that this was information that Arcadis came up with prior to the Master Plan update in 2001. As part of the new Master Plan and hydraulic modeling, MSD will see how this average has changed. He further stated that there are still issues with rain events, but with the rehab program, a lot of the baseline infiltration coming in on the interceptors has been reduced. Mr. McGill stated that the primary focus of the rehab program is the elimination of SSO's, with I&I being secondary.

Mr. McGill reported that following the draft Facilities Plan document, it was determined there were facilities that were under-performing, or not performing at all. As a result, he and MSD staff met over several months to focus on the following processes.

1.) Under performance of the Grit and Grease removal system.

2.) Reasons for failures in the RBC basins.

3.) Over performance of the Intermediate Clarifiers.

4.) Under performance of the Secondary Microscreens.

Regarding the Grit and Grease Removal system, Mr. McGill reported that they met several times with Schreiber representatives on-site to review the condition,

performance, capacity and current operating modes of the process. Based on these visits, Schreiber said the basins are properly sized, however, aged equipment needs replacement, and the current mode of operation needs to be switched to the original sequential mode. The proposed improvements include replacing the piping and air diffusers in the grit basins and reconfiguring the current operational process, which can mostly be done in-house. Mr. Venable asked how old the system is. Mr. McGill said the facility was built in the 80's, with normal maintenance occurring since that time.

Regarding the RBC's, Mr. McGill reported that it was found that there may be hydraulic and biological loading imbalance problems, which is a performance issue. He stated that the primary issue is age. MSD was told by the manufacturer that the average useful life of the RBC's is 25 years, but no plan is in place for replacement. He further stated that the RBC's are beginning to have shaft failures. He said that short term, MSD needs to come up with a plan to replace the RBC units and decide how to get them out and put new ones in. The other problem is that parts are not available for the shafts. Long term, MSD needs to consider changing the process. Mr. McGill reported that staff is monitoring treatment everywhere in the plant to see what impact these failures have. Also, MSD is correlating with plant influent conditions to see how it's flowing through each process and how it impacts the other treatment processes.

Regarding the intermediate clarifiers, Mr. McGill reported that the initial purpose of the clarifiers was to assist with the secondary microscreens, which did not work properly when installed. The manufacturer built the intermediate clarifiers to offset the lack of performance of the secondary microscreens. He stated that MSD plans to do a stress test on the clarifiers to learn what their full capacity is and eventually change the RBC three (3) basin out to secondary clarification and replace intermediate pumps with electric motor driven pumps. In addition, the secondary microscreens are not performing, and need to be replaced with an alternative process. He further stated that on-site equipment pilot testing is planned with two companies in May.

Mr. McGill reported that the overall short term plan is to replace the grit and grease removal process; replace out of service RBC's; develop a plan to change out the RBC's; replace intermediate pumps with electric motor driven pumps and pilot test in May. He further reported that the medium term plan (5-7 years) is to replace the secondary microscreens with alternative technology in the existing building and evaluate the need for additional intermediate clarification to correlate with the first phase of eliminating the RBC's. Also, evaluate whether RBC basin three (3) should stay in service. For the long term, change the entire RBC process to something else, which could take up to 20 years.

Mr. Aceto asked what the Board should be doing to keep up staff on what is being done. Mr. McGill suggested that staff provide status reports to the Board. Mr. Hartye stated that this will be incorporated into the Capital Improvement Plan and brought to the CIP Committee. Mr. Haner asked if staff contacted other RBC users. Mr. Kiviniemi stated that they did contact other facilities and spoke to one who is having mechanical shaft problems similar to MSD and that part of complexity of the problem is access to the units. Mr. Venable asked how much this will cost and how MSD plans to raise the money. Mr. Hartye stated that the biggest expense near term is replacement of the microscreens. He further stated that MSD has contacted vendors to get an idea of the cost, which were put into the CIP as a planning level estimate. As far as the impact on the CIP, some of these issues were addressed in prior years and included in the CIP, therefore, the total cost for the 10-year CIP has not changed significantly, but where and how much for a particular year, has changed, which can be handled financially with the timing of the Bonds. Mr. Venable asked if this will slow down the CIP. Mr. Hartye stated that MSD has requirements for rehabilitation of lines, which is 50,000 feet a year, but feels the additional costs can be spread out over time.

9. Consideration of Purchase of Equipment for Existing Schreiber Grit Removal System:

Ms. Bellamy moved that the Board adopt staff's recommendation for approval of a sole-source purchase of the itemized Schreiber equipment in the amount of \$351,300.00, contingent upon review and approval by District Counsel. Mr. Kelly seconded the motion. Mr. Aceto called for discussion. Mr. Haner asked if the installation can be done by staff. Mr. Kiviniemi said most of the work can be done by staff, but portions may be contracted out. Mr. Haner asked if the contract would come before the Board. Mr. Aceto said yes. Mr. Clarke explained that purchases of equipment of more than \$90,000 must be advertised unless performance based competition for the equipment is not available or standardization is an overriding consideration for approving this as a sole-source purchase. For construction contracts of more than \$300,000 MSD is required to advertise, although MSD advertises for anything over \$100,000. With no further discussion, Mr. Aceto called for the question. Roll call vote was as follows: 10 Ayes; 0 Nays. Mr. VeHaun was absent during the vote.

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None

11. New Business:

None

12. Adjournment:

With no further business, the meeting adjourned at 3:30 PM.

Jackie W. Bryson, Secretary/Treasurer