

**Central Wastewater Region Large User Advisory Board Meeting
Wednesday, May 14, 2008 – 1:30 p.m.
Peele-Dixie Water Treatment Plant**

Voting Members Present:

Julie Leonard, City of Fort Lauderdale/Assistant Utilities Services Director, Operations
Elise Hogan, City of Fort Lauderdale/Acting Treasurer
Victoria Minard, City of Fort Lauderdale/Assistant City Attorney
Dave Womacks, City of Oakland Park/Public Works Director
David Archacki, City of Wilton Manors/Public Services Director

In Attendance:

Miguel Arroyo, City of Fort Lauderdale/Water and Wastewater Treatment Manager
Mark Darmanin, City of Fort Lauderdale/Distribution and Collection Systems Manager
Robert Nielsen, City of Fort Lauderdale/Technical Services Manager
Pat Long, City of Fort Lauderdale/GTL Wastewater Treatment Facility Manager
Susan LeSage, City of Fort Lauderdale/Utilities Financial Administrator
Susan Smith, City of Oakland Park/Assistant Public Works Director
Richard Lorenz, City of Tamarac/Maintenance Superintendent
Brian London, City of Tamarac/Wastewater Supervisor
Neil Buckeridge, Town of Davie/Superintendent of Operations
Tim O'Neil/Camp Dresser & McKee
Shani Bryce/Camp Dresser & McKee

Welcome – Julie Leonard

Julie welcomed everyone and called the meeting to order at 1:35 p.m. by thanking everyone for attending this quarterly meeting.

Introduction of Advisory Board Members and Guests

All attendees introduced themselves.

Approval of January 30, 2008 Minutes

Miguel Arroyo made a motion to approve the minutes and Julie Leonard seconded it. A vote to pass the minutes was unanimous.

Update on the G.T. Lohmeyer Wastewater Treatment Plant – Pat Long

Construction Project Updates

- Security System Project
The new plant fencing and new entrance gates were installed in July 2007 and are now complete.
- Influent Screening Equipment
New Auger monsters were installed in 2005. When the second unit was installed, the first installed unit suffered a major failure. New style auger monsters have been designed and four new units were installed. Certificate of Significant Completion was issued in July 2006. The warranty period commenced in August 2006; the project is nearing final closeout. We still have issues with the new system; equipment has failed on a fairly consistent and premature basis. We are working with JWC Environmental to investigate some final

measures to either improve the performance or investigate new equipment. New differential level sensors have been installed to maximize the efficiency and improve performance. A JWC engineer is doing a week-long evaluation of the equipment performance including removal and inspection of all units. The manufacturer has extended the warranty to October 2008.

- Concrete Repair Pretreatment Flow Distribution Chambers – Work began in August 2007. The South Effluent Box was completed January 2008 and North Effluent Box work is scheduled to be complete by the end of May 2008. Influent channel concrete repair and an additional new 54" force main tie-in are to commence in May 2008.

Additional Ongoing Projects:

- Flow Distribution Gate Replacement – Punch list items being addressed.
- Emergency Plant Generator Replacement – Complete April 30. Punch list work continues.
- Cryogenic Facility Instrumentation System Upgrades - scheduled for CY 2008.
- Sludge Pump Station Rehabilitation - Sludge Pump Station No. 1 is now fully operational and final punch list work is ongoing. Sludge Pump Station No. 2 is fully operational and final punch list work is ongoing. Work on Sludge Pump Station No. 3 is in progress and approximately 95% complete.
- Work on the Non-Potable Water Pumping Station is in progress and is approximately 75% complete.
- Electrical System Upgrades - Notice to Proceed was issued in February 2006. The old equipment was demolished and concrete housekeeping pads were formed. New transformers, switches and control systems were installed and cutover is in progress; approximately 95% complete.
- Air Conditioning System Upgrades (Effluent Building) - Notice to Proceed issued in February 2006. Work began in August 2007 with an expected completion date in May 2008.
- Sludge Dewatering Feed Pump Replacement – All eight pumps are installed and in use. Final punch list work is in progress.
- Currently in design stage for: PA system upgrade, liquid oxygen storage tank replacements, concrete repair, grit classifier replacement, seal water system replacements, new hoisting equipment in pretreatment building, new spare parts storage area, and lime silo removal and roof repair.

Capacity Issues

The Master Plan was completed in August 2007. The Master Plan indicates that theoretical instantaneous effluent disposal velocity may soon be reached (2008). Reuse options to managing that challenge may include the installation of a sophisticated MBR (Membrane Bioreactor), which can produce water quality that can be utilized for irrigation, canal recharge, salinity barriers or other non-potable purposes.

The City of Fort Lauderdale, continuous with an aggressive program to reduce infiltration and inflow (I&I), is expected to reduce the peak flows into the plant. Another alternative includes the installation of an additional (sixth) deep injection well. Newly enacted federal and state regulations call for additional treatment prior to disposal in future injection wells. Currently GTL has no provisions for providing additional treatment. The cost for installation of additional filtration systems and high-level disinfection, including fixed operational costs, is estimated in the Master Plan to be \$68M (2007 dollars). The general wastewater consultant has completed an initial reuse study ranking various reuse alternatives as far as cost, benefits, and public acceptance.

Operational Issues

The GTL Facility has been meeting or exceeding all regulatory requirements. Rule revisions of FAC 62-640 are currently in public hearing stages. The City of Fort Lauderdale has partnered with the City of Margate, Town of Davie, City of Plantation and Broward County to conduct a study to evaluate biosolids treatment and disposal on a regional basis. Counties throughout the State have established coalitions to examine this challenge and to develop solutions that provide the best available technology at a reasonable cost. The study will take about a year to complete. Currently the GTL Facility has some of the lowest costs for sludge disposal in the area but this is expected to change when the available disposal capacity at Broward County's Central Landfill is consumed.

Budgetary Issues

There are no remarkable budgetary complications at this time. Budget development was completed in March 2008 for the FY2008/2009 budget. External influences such as fuel price increases, chemical price increases, insurance increases and electric power increases are anticipated for next year's budget cycle. The Department of Energy's Energy Information Administration (EIA) is forecasting a 3% increase in electricity prices for commercial customers in the South Atlantic Region in 2009.

Employee Highlight

Our staff, consisting of operational, laboratory, mechanical and collection system personnel participated in the State of Florida "Operator's Challenge" on May 6, 2008. They reclaimed the championship after finishing second last year. A second City team that was formed this year finished third. The first place team is scheduled to compete at the national competition in Chicago in October.

Miguel mentioned that the peaking factors have somewhat come down which is an indication of many factors including the City's efforts in lining sewers and better control of what is happening in the collection system by the collection staff.

Rate Calculations – Susan LeSage

Susan distributed three spreadsheets for the Advisory Board's review. She first drew the attention of the Board to the Computation of Rates to be Charged spreadsheet and explained that Central Accounting has completed the year-end audit and these financials are final. The actual rate for 06/07 is \$0.78913448 per 1,000 gallons resulting in refunds for each large user. She further explained that the rebate included the refund for normal operations, the re-class of the bonds, and the surcharge.

Susan then discussed the second spreadsheet, which detailed the expenses for the Central Region through the seventh month of the current year (2007/2008). At this point, the year-to-date costs are under-budget. She explained that the Treatment Manager would like to complete several projects in this current year that would total about \$200,000. Even with these projects included in the actual dollars spent, we would still be under-budget.

The third spreadsheet detailed the rebates that are due to each city. The final audit is now complete and the checks are scheduled to go out at the end of May.

Bob Nielsen advised that the auditors report prepared by Ernst and Young is included in the packet given to the large users.

Old/New Business

Re-Use Plans

Miguel stated that the Reuse Feasibility Study being done by CDM is looking at many options but the main point is that the study will provide us with options that we can present to the Florida Department of Environmental Protection on what to do with the wastewater and also to the SFWMD to give us offsets for our Water Consumptive Use Permit.

The City has taken the approach of looking at the entire issue of water and wastewater to find a better solution that affects both fronts instead of just going blindly in one direction for water and blindly in another direction for wastewater. This will translate into better service for our customers and the large users and also lower cost.

Shani advised that at this point in the project, because of new information from Palm Beach County, we are at a decision point. There is an option for exporting re-claimed water to Palm Beach County and recently Stewart Magenheimer of CDM spoke with Palm Beach County officials and they are in favor of possibly a long-term agreement with the City to export the reclaimed water to Palm Beach County; they feel they probably will be financially able to support this project if needed and it would be considered a regional solution. The only downfall is that the City will not receive credits from SFWMD for our Consumptive Use Permit. This option needs to be discussed with City staff further. Miguel advised that there will be a meeting with CDM on May 30 to discuss.

Miguel stated that one of the ideas being explored by SFWMD is to use the wastewater after it goes through membrane, phosphorus/nitrogen removal, ultraviolet disinfection and reverse osmosis, which would make it of a high quality, and inject it into the ground for both a saline barrier to prevent any more water coming in as well as a credit for the Consumptive Use Permit but it has a major cost – some estimates put it at \$15/gallon which would make it about a \$200M project. On the other hand, if we send the water to Palm Beach, we lose the Consumptive Use Permit credit but the cost drops. Depending on which way we send the water - if we send it with a membrane bioreactor alone and the piping, we are looking at a cost of approximately \$100M, which would potentially be half the cost. These are issues that need to be explored and we will discuss at the May 30 meeting with CDM.

Tim O'Neil advised that CDM is a couple of months away from wrapping up the Re-Use Feasibility Study.

Biosolids

Tim O'Neill spoke about a couple of rule-making topics. One is biosolids, the waste sludge at wastewater treatment plants. FDEP is becoming more stringent and it impacts many wastewater treatment facilities but not the City's since we send our sludge to a landfill but this could change in the future, as landfills become full and may not want our sludge. It's a volume issue for them since they have less room to store solid waste. FDEP would like to have sludge that is a fertilizer and could be sent to a fertilizer company, which would add to the cost of disposal. Tim believes we are in good shape for the next 3 to 5 years, but the idea is out there and will eventually impact the City's wastewater facility.

There is ocean outfall rule-making taking place that by the year 2025, there will be no disposal of effluent into the ocean. The City sends effluent 3,000 feet underground via five deep injection wells. We have an ocean outfall from when the plant was first built, but it is only used during a plant shut-down or to test the effluent or deep injection wells for a short period of time. We are

asking in the rule-making that this practice be allowed to continue and are looking for clarification of this rule.

Tim stated that these rule-making issues will impact other municipalities, but not necessarily Fort Lauderdale at this time.

Miguel advised that the new rule on biosolids that was referenced is so restrictive that, theoretically, a farmer growing oranges using biosolids as fertilizer could not eat the orange that he grew on his property but would have to send it out of the County because of the effects of nitrogen-loading to the system.

The effluent from the GTL Wastewater Treatment plant is injected approximately 3,100 feet below the land surface. This is done via 5 injection wells located about one mile southwest of the plant.

Miguel stated the wells have a periodic injectivity test conducted on a monthly basis plus a mechanical integrity test conducted every five years. In addition, we sample all three monitoring wells at the injection site on a weekly basis plus two remote monitoring wells on a monthly basis. No adverse trends have been identified.

Dave Womacks questioned our sludge-hauling contract and Miguel advised we have at least two more years with Synagro before renewal.

Regarding water, Miguel mentioned that the large users will receive an e-mail advising that our free chlorination period will begin at 11:00 p.m., Saturday, May 17, 2008 and end at 11:00 p.m. on Saturday, June 7, 2008.

Utility Rate Study

On April 1, the City awarded a contract to Burton and Associates, St. Augustine, to do a complete rate study; they did a rate study for Coral Springs and have other contacts in South Florida. We are gathering a lot of data for them – customer information, usage, operating budget, capital projects, WaterWorks Program and financial information. At this point, there is nothing new to report other than they seem to be competent and seem to know what they are doing. They were given a date of the end of June to have the study completed with their recommendations. At that point, we will decide if the rates get rolled into a few years of rate changes or if it all happens at once. Julie asked them about a conservation rate structure for wholesale water users and this will be reviewed. They will also review and analyze fixed fees, usage fees and the drought rate.

Julie thanked everyone for their input at the meeting and invited attendees to take a tour of Peele-Dixie's new membrane building conducted by Cesar Alza.

Next Meeting

The next meeting will be held on Wednesday, August 6, 2008 at 1:30 p.m at Fiveash Water Treatment Plant, 949 NW 38th Street, Fort Lauderdale, FL.

Dave Womack made a motion to adjourn the meeting and Dave Archacki seconded it. The meeting adjourned at 2:00 p.m.

MG

5/20/08 S/Shared Cabinet/Departmental/Administration/WW Large Users