

**Central Wastewater Region Large User Advisory Board Meeting
Wednesday, May 09, 2012 – 1:00 p.m
George T. Lohmeyer (GTL) Regional Wastewater Treatment Plant**

Voting Members Present:

Julie Leonard, City of Fort Lauderdale/Assistant Utilities Services Director, Operations
Don Halquist, City of Fort Lauderdale/Senior Accountant
Cole Copertino, City of Fort Lauderdale/Assistant City Attorney
Susan Smith, City of Oakland Park/Public Works Director
David Archacki, City of Wilton Manors/Public Services Director

In Attendance:

Mark Darmanin, City of Fort Lauderdale/Distribution and Collection Systems Manager
Miguel Arroyo, City of Fort Lauderdale/Water and Wastewater Treatment Manager
Pat Long, City of Fort Lauderdale/GTL Wastewater Treatment Facility Manager
Susan LeSage, City of Fort Lauderdale/Financial Administrator
Cliff Sanders, City of Fort Lauderdale/Regional Wastewater Plant Operator II
Brian London, City of Tamarac/Wastewater Supervisor
Chet Jablonka, City of Tamarac/Utilities Maintenance Supervisor
Ruth Burney, CDM Smith, Inc./City of Fort Lauderdale Wastewater Consultant
Tim O'Neil, CDM Smith, Inc./City of Fort Lauderdale Wastewater Consultant

Welcome – Julie Leonard

Julie Leonard welcomed everyone and called the meeting to order at 1:01 p.m.

Introduction of Advisory Board Members and Guests

All attendees introduced themselves.

Approval of January 11th, 2012 Minutes

David Archacki made a motion to approve the minutes from January 11th. Susan Smith seconded it. A vote to pass the minutes was unanimous.

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

Construction Project Updates

- Influent Screening Equipment
A purchase order and a notice to proceed were issued to Cardinal Contractors for the work to which begin January 9, 2012. Submittal reviews are on-going. FDEP has given approval for no permit needed for this work. City permits are in the process of being secured.

- Protective coating of concrete in influent channel was completed June 3, 2011. The isolation of the 54" influent force main began January 16, 2012. 100' of suspect concrete pipe, a 48" tapping valve, 54" tee, two 48" valves, a 24" plug valve, and venturi flow meter were all replaced by January 21, 2012. During filling of the piping, a failure occurred in the 54" piping close to Cordova Road. It was secured without an SSO event. However, the replacement of this influent force main was deemed to be an emergency and construction was initiated March 26, 2012. The 54" piping is being replaced with 48" ductile iron. Two new ¾" stainless lines are being installed as part of this project for hydrogen peroxide feed for odor control. No peroxide feed is possible during the project. Also a new 54" valve was installed and put into operation February 10, 2012 just west of the new tee to allow flow to enter GTL through a 24" line from the east during construction of the new piping.
- City permits have been secured for ABC Construction to begin work on the pre-treatment building parapet wall replacement and building improvements. Work is scheduled to begin the week of May 14, 2012.
- Three refurbished reactor mixers were put into operation in September 2011. Approval was given at the December 20, 2011 commission meeting to refurbish nine additional reactor mixers along with replacement of mixing shrouds at a cost of \$532,000. Three mixers on Reactor 2, train D are currently removed for refurbishment. Cleaning of grit from the interior of this train has yielded 73 tons with one third of the cleaning completed. Some concrete repairs are also being performed on columns within this reactor train.
- A 48" PCCP line carrying raw influent to reactor 2 failed September 27, 2011 resulting in a small SSO. An above ground ductile iron line was installed and completed on October 30, 2011 to restore flows to reactor 2 and restore full function of the treatment system. Consultants and City Staff are in the process of evaluating 8,000 feet of similar pipe installed in the plant in the early 1980's.
- One new aeration blower and all new aeration diffusers were installed on the south sludge holding tank in November 2011. Similar improvements were completed on the south sludge holding tank in March 2012.
- Effluent pump #3 experienced a failed bearing October 13, 2011. Poole & Kent removed the pump, installed a spare, and the pump was returned to service October 19, 2011. The actual cost of the removal, installation, and repair was \$156,631 due to the installation of a more durable impellor to combat cavitation damage prevalent during all pump rebuilds.
- Hyperchlorination of the injection wells was unsuccessful in restoring adequate injectivity performance to the wells. We are pursuing with CDM Smith a project to chemical clean the wells as well as evaluate the performance of the existing effluent pumping system.
- Cryogenic Facility Instrumentation System Upgrades – This project has moved to a close out status. The instrumentation upgrades were removed from this project for a credit.
- A leak in the hydrocarbon adsorber system at the cryogenic facility has resulted in an emergency declared project to repair the leak along with performing maintenance items which are overdue by two years. After this project is completed, a RFP will be developed to

complete the instrumentation upgrades as Air Products was unwilling to agree to the City's contract terms and conditions.

- A bid proposal was recently opened to replace three sludge feedwell mixers and associated repairs for \$95,000. Approval by Commission is scheduled for June 5, 2012

Capacity Issues

Annual average flows for the last twelve months are currently at 39.116 MGD. We will be at 40 MGD annual average flow for some parts of the coming year because of the high flows from October and November 2011.

Annual Capacity Analysis Report was submitted to FDEP April 27, 2012.

Operational Issues

FDEP injection well permit became effective January 23, 2012. Expires January 11, 2017.

An Operator II position was filled April 2, 2012. We have promoted two employees effective May 13, 2012 to a Chief Mechanic and Mechanic II position. We still have seven open positions at the facility.

Budgetary Issues

Investigation and mitigation of PCCP pipe issues.

Six employees retired by March 16, 2012.

Rate Calculations – Susan LeSage

Susan LeSage presented two spreadsheets for fiscal years 2010/11 and 2011/12 up to the end of April. Ms. LeSage explained we are 60% through the budget year and the budget is 36% spent as compared to 37% this time last year, however the flows are higher. Generally, the lower the flows, the higher the price per thousand gallons increases. Ms. Leonard asked if the return on investment (ROI) has been determined yet for FY 2012/13. Ms. Lesage said it has slightly increased because the value of infrastructure is greater than the previous year. Mr. Long said it is about 10% higher.

Old/New Business

Tim O'Neil from CDM said they are finalizing the annual Renewal and Replacement (R&R) Report. The report is one of the criteria used to determine the proposed wastewater rates in August.

There are plans to remove regional re-pump station A and remove regional pump station D54 from the regional fund. Because of the pipeline breaks, pipeline costs have been identified. Miles of regional force mains identified outside the George T. Lohmeyer (GTL) Regional

Wastewater Treatment Plant fence have an estimated cost of \$100 million. Should pipeline break inside or outside the fence, the cost is not included in the R&R because it is covered by the City. However, if breaks continue, identifying the regional pipelines and assigning a cost is something to be done.

Ruth Burney explained the approximate annual amount for re-pump A was \$150,000 per year. The regional force main put in has a \$100 million total estimated cost and pipeline has a 50 year expected life span with an annual cost of \$2 million. The \$2 million is applied starting in 2027 because it is 50 years out from the oldest pipe installed in 1977 based on the City's records on the map acquired from the City's GIS division. The net cost is \$450,000 for next year.

Ms. Burney said pump station D is being decommissioned within the next year, so any renewal or replacement cost has been removed. Mr. Darmanin explained the net difference is between \$300,000 and \$450,000 and every \$150,000 equates to a penny increase in the rate. David Archacki noted the ROI is in addition to the R&R and added later. Mr. Darmanin noted there are many calculations prior to a rate being finalized such as, it does not include savings on operating budget. Mr. Archacki questioned the ROI including items already being contributed under maintenance and additionally asked if they are paying toward the ROI on money they are already paying as part of their bill. Mr. Archacki further stated they pay into the regional, the regional makes the repairs out of the regional fund, and then they have to pay ROI out of the money they are paying for the repairs. Mr. Arroyo said they are paying only on those items considered capital. Mr. Archacki said just a portion, major repairs, are ROI. Mr. Darmanin explained if there is a capital improvement added to the asset, the assessed value is increased because the original is improved. Mr. Archacki asked if they are paying a return on a capital investment they help fund. Ms. Leonard said they are. Mr. Darmanin said the reason this is being looked at is because one of the Large Users asked for a cost of services review on the water, the City Manager agreed but wanted to do it across the board. The process was delayed so the cost of services implementation was delayed as well. Ms. Leonard said the report will be a component used at the next meeting in August when the rate is voted on. The budget will be reviewed by the Commission during the summer. Mr. Arroyo said any changes will be voted on and incorporated in the new fiscal year starting October 1st. Ms. Leonard said a resolution to the Commission will be done.

Mr. Darmanin asked what has been the typical process to accept the R&R. Miguel Arroyo said the process of doing the R&R, which is required by EPA regulatory agencies, has been to hire CDM to make recommendations based on the way the system is reacting to what the flows are being exposed to. The City reviews the recommendations, an agreement is made, the R&R revisions are issued, the City reviews the R&R, and a final R&R is submitted then brought to this committee. Then the rate is voted on. Mr. O'Neil said in addition to the regulatory, the R&R is done as part of the Large User agreement. CDM has an operator/engineer who talks to operators to identify what needs repairs in the near future. There is still the ability to push out the cost another year and lessen the cost of this year. Mr. Darmanin said the 48" pipe inside the fence does affect the R&R because is paid for by the City from the regional fund. It affects the operating fund and then affects the end of the year rate. While he does not know total value of the yard piping, Mr. Darmanin said the life cycle should be increased. Mr. Arroyo said once it becomes permanent it will. If it gets transferred the cost does not become part of the calculations because it has been spent, only the removal of the old pipe and putting in existing pipe. Mr. Darmanin said the 50 year life cycle starts the day it is installed not the day it was made permanent. Mr. Arroyo said it is kept above ground thereby reducing the life cycle. Mr. Darmanin asked if that is something CDM wants to look at. The pipe lifecycle is based on the

amount put in. Pipe replacement in the walls of the plan is considered yard piping. Mr. Darmanin said 1-2% equates to \$100,000-\$200,000.

Mr. Darmanin asked CDM if they wanted to explain the other methodology looked at which is the actual age of pipe frontloading versus what was decided. Ms. Burney said under this option they assumed there was an equal amount spent every year for 50 years to replace the whole system. As it gets closer to 2027, the table changes every year. The other way it was looked at it, based on City records, was knowing how many linear feet was put in at what time (approximately 20% in 1977 and 1981 and so on) and what typically is done to put that amount to be replaced in that year. Unfortunately, because the bulk of the system was put in earlier, it front-loaded the costs so it ends up being a large amount spent upfront to replace rather than spreading it out. Mr. Burney said for comparison with the even annual amounts, \$4.3 million is the expected deposit next year. The assets are time dated according to when they were put in and the number increases to \$8.4 million because it is lumped out between 1977-1981-1984. Mr. Darmanin said options were looked at and it is an \$8 million dollar cost to start. To start fresh and push out to 2027 before replacing pipe, there was a savings and reduces it to \$5 or \$10 million. Mr. Arroyo said we have the flexibility to stop something else because of a higher priority and \$2 million average is a realistic average and easier for budgetary reasons.

Mr. Archacki said Bob Mays would want to look through the material CDM provided. They want their meter in their city. They do not have force main going through other cities for underground locating purposes. If it could be diverted and not shared, it takes the pressure off and this would free up the extra pipe while reducing extra footage. Mr. Darmanin said we need to find the cause first. Mr. Archacki said if an amount of footage can be cut, then there will be a 20 year lay out plan. Ms. Burney said the pipe identified is the primary system and if a line breaks or needs to be diverted it gets close to other city pipes. Mr. O'Neil said there are other ways to produce and there are many more miles.

Mr. O'Neil offered a pdf version of the map shown to the group.

Next Meeting

Ms. Leonard said the next meeting is when the next fiscal year rate will be set and suggested meeting early as possible. The meeting is scheduled for Wednesday, August 1st at 1:00 p.m. The location is to be determined.

Adjournment

Ms. Leonard asked for a motion for adjournment. Mr. Copertino made a motion to adjourn the meeting and Ms. Smith seconded it. The meeting adjourned at 1:52 p.m.