

**CITY OF DERBY  
WATER POLLUTION CONTROL AUTHORITY  
April 21 2010  
Regular Meeting  
MINUTES  
7:00 p.m.**

**Meeting called to order** 7:05 p.m.

**Pledge of Allegiance** all rose and pledged allegiance

**Roll Call**

**Present:** Leo DiSorbo - Chair, Carolyn Duhaime,  
Richard Bartholomew, and John Saccu.

**Also Present:** Lindsay King WPCA Superintendent, Mr. Tony DeSimone of  
Weston & Sampson.

**Excused:** Richard Stankye

**Additions, Deletions or Corrections to the Agenda**

**A MOTION** to add the Superintendent report to the agenda by Ms. Duhaime, second by  
Mr. Bartholomew, all in favor, **motion carried.**

**Public Portion**

No one from the public spoke. Public Portion closed.

**Approval of minutes – March 17, 2010 Regular Meeting**

**A MOTION** to approve by Ms. Duhaime second by Mr. Bartholomew, all in favor, **motion carried.**

**Transfer \$1,110.00 from 6200-230-0233 Gasoline to 6200-400-0431 Plant Maintenance**

**A MOTION** to approve by Mr. Bartholomew with a second by Ms. Duhaime, all in favor, **motion carried.**

**Transfer \$800.00 from 6200-160-0164 Vehicle Maintenance to 6200-400-0420 Lab Supplies**

**A MOTION** to approve by Ms. Duhaime, second by Mr. Saccu, all in favor, **motion carried.**

**Approval of expenditures – Mar 19, 2010 – April 16, 2010**

**A MOTION** to approve by Mr. Bartholomew with a second by Ms. Duhaime, all in favor,  
**motion carried.**

**Update on Process Model Calibration by Weston & Sampson**

Mr. DeSimone of Weston & Sampson explained the building of an analytical electronic biological model of the treatment plant. This model will be used by staff for process control and evaluations for future needs at the treatment plant (ie: how big do the tanks need to be). The data from the staff is entered into the model and that sends back data. The data is checked versus the plant's data and that tells if the model is calibrated (exact model of the plant). This is one of the building blocks to set up for the future of the treatment plant study, like the blower study. The model is going to be used when doing

the solids handling and digester study, which will likely get rolled into the facilities plan. This model is a tool which will be used as part of that and for future analysis of the treatment plant.

The sampling data should be in within the next couple of weeks and will start building the model. There is an average day and a max 30 day which is the design condition. When you are sizing tanks, you size them for your max 30 day condition and then make sure it can handle the peak flow in addition to that. For figuring; an average day, two times is max 30 day and five times is peak day.

There is a meeting with DEP next Friday April 30th at 10:00 a.m. with Dennis Greci to see what they will fund for the studies. Tony will need a head count to notify DEP.

### **Blower Evaluation Study**

Mr. DeSimone presented information regarding blowers. The booklet handed out to members is the Treatment Facility Aeration System Evaluation. Blowers put oxygen in the wastewater. It looks at what is needed to have adequate aeration capacity to treat an average daily flow of 3 mgd. The aeration capacity takes the nasties out of the water, bringing the smell down. This is the heart of the plant (biological part).

There is only one blower being run. The other blowers are very energy deficient and if run would be very costly. There are U.I. rebates available. The best approach would be to add one aeration blower and U.I. will give a rebate for approximately \$90,000.00.

The capital cost to add a blower is roughly \$200,000.00 for equipment only and U.I. will give a rebate for \$90,000.00. The completed installation costs including engineering and contingency is \$227,000.00. There are two types listed, the K-Turbo blower and the Neuros blower. The Neuros blower appears to be the best one on the market.

The existing blower was installed in 2000. That is when the aeration basin was re-designed. The blowers before that (from the 70's) cannot be run. They are 200 horse blowers, very inefficient. There is only one blower to run 24/7 since 2000. If the existing blower were to go down the backups (from the 70's) would have to be run at a high energy cost. The question is whether to do something now or roll it in the bigger plan. If the blower were to go down, the operating budget would go up by \$20,000.00 to \$30,000.00 a year.

Mr. DeSimone said some of the manufacturers may be willing to do a three year payment. Mr. DeSimone will try to get some information in writing.

The blower will pay for itself within three years, and after that there is money saved on operation. The blower can be used at any plant.

The next part of the evaluation addresses long term aeration system needs at the existing site.

Mr. DeSimone looked at retrofitting the basin currently not used based on 3 mgd. There are serious issues with ragging of the mixers. A screen on the effluent could stop this from happening.

Mr. DeSimone explained the long term costs of doing an aeration system upgrade. Mr. DeSimone looked at the needs for the blowers, the diffusers in the tank where the air

comes out of, the condition of the piping that feeds the air to the tanks and the issues with the ragging. To solve those issues will cost about 4 million dollars. This would give four new blowers, (for redundancy and peak flows) and retrofit the third aeration basin. Two blowers would run 70% of the time, three would run maybe 15% of the time. If this were done now, it would benefit the upgrade for the new plant. This gives tank redundancy. Currently, there is no ability to sustain losing one of the aeration basins or clarifiers. This would give that ability under today's flows, not in the future.

**Set Budget Workshop Date/Public Hearing Date**

The Authority will meet on April 29<sup>th</sup> at 6:30 p.m. to review, discuss and take action on a preliminary budget.

There will be a public hearing on May 12<sup>th</sup> at 6:00 p.m. with a meeting to follow immediately after the hearing to adopt a final budget.

The next regular meeting of the Authority will be on May 19<sup>th</sup> at **5:30 p.m.**

**Old Business**

Mr. Saccu stated there were two companies that postponed the site visit for the roofs due to weather. Mr. Saccu went up later in the day.

There was a \$50,000.00 quote from Up and Over for replacement of four roofs, there are no guarantees. There will be two more quotes coming.

Is it worth replacing the roof only to get four or five years out of it, or leave it as it is.

Mr. King's concern is if it leaks on some equipment. Right now, he is losing ceiling tiles and there is paint peeling.

Mr. DeSimone said he talked with Mr. King about demolishing buildings on site. The building where the roof is needed the secondary process control where the blowers and the lab is, you could put another story on that building. The building may have been designed to add another story.

**Superintendent Report**

There was a blockage on Rockwell and a couple hundred feet of sewer line has to be replaced at our cost. There is a budget line item for this type of expense.

The plant had heavy rain flow. There was a permit violation for suspended solids. The permit has a limit of 50 parts per million. The plant had 100. It had to be reported to DEP. The nitrogen was 144 pounds for the month and the permit is 87.

**Adjourn**

**A MOTION** to adjourn at 8:10 p.m. by Mr. Bartholomew with a second by Ms. Duhaime, all in favor, **motion carried.**

*Respectfully Submitted,*



Denise Cesaroni  
Recording Secretary

\*\*\*\*These minutes are subject to approval by the Water Pollution Control Authority at its next regular meeting.