

# **Water Pollution Control Plant Monthly Report**



**MAY 2012**

## **OVERVIEW AND HIGHLIGHTS**

During the month of May the primary focus was to repair the leak in the non-potable water piping from the Tertiary building to the Blower building. The leak was discovered to be under the plant transformer pad and un-accessible by digging. The pipe was exposed closer to the tertiary building and capped by Water Distribution personnel and plant personnel. A new pipe was installed off of the non-potable pipe to the flow control building that travels through No. 5 aeration tank into the blower building basement. The new 3 inch PVC piping is delivering increased water pressure to the belt filter press improving the cleaning of the belt during pressing operations.

The No. 2 anaerobic digester mixer was taken to a local vendor to have the shaft repaired. The new shaft is being fitted with new bearings to be placed back into service in June. The operator's laboratory, located in the blower building was re-organized and cleaned during the month. The lab is being re-arranged with new counters and ergonomic seating for the operations staff.

In May the plant began chlorinating and de-chlorinating the plant effluent. The chlorination building has been retrofitted with new sink and sample analysis station for operations staff. The chlorination building also has new SCADA monitoring and a control station for operations.

Plant staff continues to work with the Electric Department on the placement of a camera at Recreation Park for video surveillance of the park and river area. The new camera will be powered by a solar energy power generation system.

## **WPCP MONTHLY STAFF MEETING AND DISCUSSION**

WPCP Staff Meeting  
Wednesday, May 30, 2012, 7:30 AM

1. Operations
  - Digester Mixer Repair – The mixer shaft has been repaired and the crane is being scheduled for placing the mixer back into service
  - No. 1 Tertiary Screw – Waiting on parts for the greaser to place screw back into service.
  - NPDES Permit Renewal – Sampling for new revised local limits has been completed.
  - New Plant H2O Piping – The leaking plant water pipe that feeds the blower building has been relocated. The new piping utilizes the piping to the flow control building and travels through No. 5 aeration tank to the blower building. Improved water pressure to the belt filter press.
  - Laboratory Vehicle – New truck has been ordered for replacement of the Lab. Van.
  - Maintenance Staff – Special mention of the assistance we have received from Steve Merscak.
2. Safety Training – CPR training performed by American Heart Association this past month for plant staff.
3. Staff Training Events – NESOWEA section meeting in Orville, Ohio was attended by Jeff Tressel, Joe Jackson, David Sudbrook and Kevin Aiken.
4. Local Gov U – Plant staff completed training on “Ethical Behavior and Workplace Violence” in the past month.

## **MAY EVENTS AND MEETINGS**

1. On May 1, 2012 Randy Bruback attended a meeting with the Downtown Painesville Association to discuss the 2012 Painesville Steelhead Fishing Tournament, to be held October 1, 2012 through March 31, 2013.
2. All WPCP staff members received CPR and AED training during the month of May, from the American Heart Association. The certification will be effective for two years.
3. On May 15, 2012 plant staff received training on "Ethics Behavior and Workplace Violence" as part of the City's Local Gov U program.
4. Randy Bruback attended the monthly Utilities Department Head Meeting with the City Manager on May 16, 2012.
5. The WPCP Safety Meeting was held on May 30, 2012.

## **GOALS AND ACCOMPLISHMENTS**

1. New non-potable piping from the Tertiary building to the Blower building. New piping has vastly improved water pressure to the belt filter press, improving the operation and cleaning of the filter belt.
2. Completed the "Local Gov U" training for plant operational staff during the month.
3. Completed AED and CPR training for plant staff, effective for two years.

## **SAFETY MEETING MINUTES**

### WPCP Safety Committee Notes May 30, 2012 @ 10:30

Attendees: Randy Bruback, Joe Jackson, Steve Merscak, Kevin Aiken, Jeff Tressel, and Leslie Balata.

1. The committee thanked Steve Merscak for the construction of brackets to hold the planking while working in the aeration basin # 5.
2. The committee discussed different options for a ladder to be installed in truck #75. Joe and Steve decided they would get together and draw up some different ideas and get back to the committee.
3. Kevin mentioned that the ropes for the throwable life preservers needed replaced. Randy asked Kevin to get information on "throw bags" which would eliminate the problems we currently have with the rope.
4. Steve asked if there were any inspections needed or required on the bucket truck we are borrowing from the light plant.
5. Randy said the plant needs to improve our fuel storage and labeling. He asked Kevin to look into the OSHA requirements for fuel storage as well as spill containment.
6. Joe Jackson is going to check with the light plant about sending our electricians gloves to the manufacturer for inspection and certification.

### Old Business

1. Kevin is checking on having all of the fall restraint equipment inspected and recertified.
2. Welding of safety bar and electrical issues on truck # 75
3. Ranger wipers, flashers, and steering
4. Cover over drain in admin building basement

### Mission Statement

*The mission of the Water Pollution Control Plant is to provide the most effective customer oriented wastewater collection and treatment to the citizens of Painesville.*



*Grand River  
Painesville, OH*

<u>Results</u>	<u>This Month</u>	<u>Last Month</u>
Avg. Daily Flow	2.31 MGD	2.52 MGD
Flow Treated	71.75 Mill. Gal.	75.64 Mill. Gal.
Raw PO	4.88 Mg/L	3.63 Mg/L
Final PO	0.75 Mg/L	0.51 Mg/L
% Removed	84.6 %	86.0 %
PO to River	0.224 Tons	0.161 Tons
Raw C-BOD	164 Mg/L	153 Mg/L
Final C-BOD	1 Mg/L	1 Mg/L
% Removed	99.4 %	99.3 %
C-BOD to River	0.30 Tons	0.32 Tons
Raw Suspended Solids	288 Mg/L	253 Mg/L
Final Suspended Solids	1 Mg/L	1 Mg/L
% Removed	99.7 %	99.6 %
Suspended Solids to River	0.30 Tons	0.32 Tons

### Meters

The Total Plant Flow meter was calibrated weekly, and found to be correct. The Lubrizol meter is checked weekly. The Total Plant Flow meter recorded 71.75 million gallons flow. The Lubrizol meter recorded 4,813,300 gallons flow.

### Detritors

2.67 tons of grit was removed during the month.

### Comminutors

1.58 tons of screenings was removed during the month.

### Chemical Treatment

15,400 pounds of alum was required at a cost of \$2,3100.00 for the removal of 2471.4 pounds of phosphorus. Cost of phosphorus removal for the month was \$0.93/pound.

### Primary Clarifiers

The primary clarifiers operated satisfactorily during the month, removing 313,400 gallons of raw sludge containing 4.1% solids.

### Anaerobic Digesters

The primary digesters operated satisfactorily during the month, transferring 382,982 gallons of raw sludge for pressing containing 3.3 % solids.

### **Secondary Treatment**

The secondary clarifiers operated satisfactorily during the month.

### **Tertiary Treatment**

The tertiary filters operated satisfactorily during the month.

### **Hypo-chlorination**

1,989 pounds of salt was used in the production of 670 pounds of available CL<sub>2</sub> to meet the chlorine demand in disinfecting the final effluent. The average residual was 0.017 mg/l CL<sub>2</sub>. The maximum effluent residual was 1.61 mg/l CL<sub>2</sub> and the minimum effluent residual was 0.84 mg/l CL<sub>2</sub>. Cost of chlorination for the month was \$273.32 or \$0.408 per pound of available CL<sub>2</sub>.

### **Dechlorination**

618 pounds of sodium bisulfite was used to maintain a maximum residual chlorine of 0.030 mg/l as per our N.P.D.E.S. Permit. Cost of dechlorination for the month was \$101.97.

### **Liquid Sludge**

The filter press processed 404,017 gallons of liquid sludge producing 262.46 tons of wet cake including 21,035 gallons of water plant sludge containing 22.8% solids or 60.15 tons of dry solids. 768 pounds of polymer were used at a cost of \$890.88. Cost of disposal at the Lake County Landfill was \$8,001.30.

### **Pump Stations**

Erie Street pumps recorded 83.40 hours and pumped 500,400 gallons of wastewater.

Fern Drive pumps recorded 45.20 hours and pumped 596,640 gallons of wastewater.

Poplar Lane pump recorded 114.30 hours and pumped 3,771,900 gallons of wastewater.

Jackson Street pump recorded 46.60 hours and pumped 852,780 gallons of wastewater.

Recreation Park pump recorded 50.70 hours and pumped 912,600 gallons of wastewater.

Sanford Street pump recorded 67.10 hours and pumped 1,006,500 gallons of wastewater.

Valley View pumps recorded 23.69 hours and pumped 255,852 gallons of wastewater.

Brookstone flow meter recorded 1,381,262 gallons of sewer flow.

The Seven (7) pump stations pumped 7,896,672 gallons of wastewater and 40 man-hours were required in maintenance.

Respectfully Submitted,



Randy Bruback  
Superintendent

Water Pollution Control Plant