

Water Pollution Control Plant Monthly Report



AUGUST 2012

OVERVIEW AND HIGHLIGHTS

During the month of August plant staff concentrated on the preparation of the 2013 Capital and Operating Budget proposals. We looked closely at the expenditures in chemicals, utilities and sludge disposal and how we could reduce costs associated with these accounts. Plant personnel retirements could include as many as three employees.

Maintenance staff concentrated on running new conduit and wiring to the electric meter to provide real time data on usage of electricity through an AMP Ohio service. We replaced the existing rubber boots on the grit separator with stainless steel. These new boots will provide extended wear in this application vs. the rubber boots. Maintenance also worked on cutting up the existing tank drives in the intermediate clarifiers and sold for scrap. Hose racks were fabricated for the storage of plant hoses.

Supervisory staff met with vendors representing doors, windows and roofs during the month. Capital funds are set aside this year for new door and windows in the blower building. Next year we will continue with this project and look to replace roofs on plant buildings.

Work has continued on the new Shamrock Pump Station by contractors. The piping to District 3 meter station is complete and the new pump station is being constructed.

WPCP MONTHLY STAFF MEETING AND DISCUSSION

August 29, 2012

7:30 AM

1. Operations

- Replacing flow meter in plant bypass chamber – Want to be able to read primary bypass flow instantaneous.
- Tertiary Valve – Waiting on spacers to replace valve in tertiary.
- Intermediate Tank Demolition – Cutting up No. 2 Intermediate Tank and removing scrap metal.
- Plant alarms – Acknowledging plant alarms by operators. Must enter code to keep alarm from advancing.
- Mark Lyons Visit – Operators have the opportunity to address concerns with the SCADA system by listing changes and improvements on the clip board in the meter room.
- Electrical Monitoring – New conduit and wire has been run to the electric meter at the front gate. New wiring will allow the plant to monitor the electrical usage at the plant through AMP Ohio.
- New Drinking Fountains – Thanks to Ed for installing new drinking fountains in Blower building and Administration Building.
- Shamrock Pump Station Update

2. Safety – Trips and Falls, PPE's, etc.

3. LocalGovU – Three more training sessions for 2012.

4. City Business

- Review minutes of department head meetings for the month of August, 2012.

AUGUST EVENTS AND MEETINGS

1. On August 1, 2012 the new Industrial Pretreatment Sampling Truck was delivered to the WPCP.
2. Randy Bruback attended an "Improving Painesville Image Committee" meeting at 66 Mentor Avenue to discuss 2013 Goals.
3. On August 2, 2012 Randy Bruback met with Chris Swansinger, TeamOne BEC to discuss and review the replacement of doors and windows at the WPCP.
4. The City of Painesville Summer Camp campers toured the WPCP on August 6, 2012.
5. John Satterfield, Fred J. Crisp Windows and Doors met with Randy Bruback on August 7, 2012 to review the 2012 Doors and Windows replacement project for the WPCP.
6. Kurt Timmons, Technique Roofing Systems, met with Randy Bruback and Joe Jackson, on August 7, 2012, to review and provide estimates for the replacement of roofs at the WPCP in 2013.
7. Randy Bruback and Joe Jackson met with Tony Loccoco, Buckeye Pumps, to review Flygt pumps on August 9, 2012.
8. Bill Carlson, Burgess & Niple Engineers met with Randy Bruback on August 13, 2012 to review the wireless camera application on the river bridge overlooking the Grand River.
9. Richard Lesiecki, City Engineer met with Randy Bruback on August 15, 2012 to discuss the bidding of the WPCP's Doors and Windows project.
10. The 2013 WPCP Budget was submitted on August 17, 2012.
11. Tim Hollo, The Garland Company, met with Randy Bruback on August 20, 2012 to discuss the 2013 Capital project to replace WPCP roofs.
12. WPCP employees attended the City Health Fair and United Way Cookout on August 24, 2012.
13. Randy Bruback attended an "Improving Painesville Image Committee" meeting on August 27, 2012.
14. Ron Hardt, YKK Doors and Windows, met with Randy Bruback on August 29, 2012.
15. A discussion on new citywide radios was held on August 29, 2012.

GOALS AND ACCOMPLISHMENTS

1. Preliminary quotes and estimate for new doors, windows and roofs at the WPCP.
2. Shamrock Pump Station is meeting the construction schedule and should be completed and in service in 2012.

SAFETY MEETING MINUTES

WPCP Safety Committee Notes August 29, 2012

Attendees: Randy Bruback, Leslie Balata, Jeff Tressel, Bud Skaggs, Tim Leonard, Kevin Aiken

1. Kevin discussed meeting with a representative from Agile Safety. He shared a quote he received on some possible new safety equipment for the plant and for the rebuild and inspection of the 3-way recovery unit.
2. Randy noticed some bees while maintenance was disassembling the intermediate tanks and wanted to make sure everyone was watching out and spraying for them as needed.
3. Bud mentioned some potential trip hazards he saw in the greenhouse. Apparently it is more of a housekeeping issue and he said if he could get someone to help him with the heavy objects he would clean them up.
4. The committee was informed that the safety issues with the Ranger truck have been repaired.

Old Business

1. Inspection of fall restraint equipment
2. Safety bar and electrical issues on truck # 75
3. Cover over drain in administration building basement.
4. Fire extinguisher training
5. Solid rail where catwalks were removed on intermediate tanks
6. Concrete and step repair around the contact chamber.

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**

Results

	<u>This Month</u>	<u>Last Month</u>
Avg. Daily Flow	1.91 MGD	2.12 MGD
Flow Treated	72.45 Mill. Gal.	65.79 Mill. Gal.
Raw PO	3.05 Mg/L	4.34 Mg/L
Final PO	0.4 Mg/L	0.71 Mg/L
% Removed	86.9 %	83.6 %
PO to River	0.121 Tons	0.195 Tons
Raw C-BOD	183 Mg/L	153 Mg/L
Final C-BOD	1 Mg/L	1 Mg/L
% Removed	99.5 %	99.3 %
C-BOD to River	0.30 Tons	0.27 Tons
Raw Suspended Solids	324 Mg/L	241 Mg/L
Final Suspended Solids	2 Mg/L	2 Mg/L
% Removed	99.4 %	99.2 %
Suspended Solids to River	0.60 Tons	0.55 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 72.45 million gallons flow. The Lubrizol meter recorded 5,788,100 gallons flow.

Detritors

2.09 tons of grit was removed during the month.

Comminutors

4.29 tons of screenings was removed during the month.

Chemical Treatment

19,200 pounds of alum was required at a cost of \$2,880.00 for the removal of 1601.2 pounds of phosphorus. Cost of phosphorus removal for the month was \$1.80/pound.

Primary Clarifiers

The primary clarifiers operated satisfactorily during the month, removing 522,345 gallons of raw sludge containing 3.5% solids.

Anaerobic Digesters

The primary digesters operated satisfactorily during the month, transferring 452,048 gallons of raw sludge for pressing containing 3.5 % solids.

Secondary Treatment

The secondary clarifiers operated satisfactorily during the month.

Tertiary Treatment

The tertiary filters operated satisfactorily during the month.

Hypo-chlorination

1,990 pounds of salt was used in the production of 670 pounds of available CL₂ to meet the chlorine demand in disinfecting the final effluent. The average residual was 0.02 mg/l CL₂. The maximum effluent residual was 1.42 mg/l CL₂ and the minimum effluent residual was 0.56 mg/l CL₂. Cost of chlorination for the month was \$273.48 or \$0.408 per pound of available CL₂.

Dechlorination

600 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 \$99.00.

Liquid Sludge

The filter press processed 485,623 gallons of liquid sludge producing 266.72 tons of wet cake including 33,575 gallons of water plant sludge containing 23.0% solids or 64.14 tons of dry solids. 1,233 pounds of polymer were used at a cost of \$1,430.28. Cost of disposal at the Lake County Landfill was \$8,193.00.

Digester and Greenhouse Heating

The anaerobic digesters consumed 0 cubic ft. of generated methane and 83,976 cubic ft. of purchased gas. The greenhouse used 0 cubic ft. of purchased gas.

Pump Stations

Erie Street pumps recorded 65.30 hours and pumped 391,800 gallons of wastewater.

Fern Drive pumps recorded 37.10 hours and pumped 489,720 gallons of wastewater.

Poplar Lane pump recorded 86.30 hours and pumped 2,847,900 gallons of wastewater.

Jackson Street pump recorded 32.90 hours and pumped 602,070 gallons of wastewater.

Recreation Park pump recorded 38.10 hours and pumped 685,800 gallons of wastewater.

Sanford Street pump recorded 59.60 hours and pumped 894,000 gallons of wastewater.

Valley View pumps recorded 21.22 hours and pumped 229,176 gallons of wastewater.

Brookstone flow meter recorded 1,645,067 gallons of sewer flow.

The Seven (7) pump stations pumped 6,140,466 gallons of wastewater and 36 man-hours were required in maintenance.

Respectfully Submitted,



Randy Bruback
Superintendent
Water Pollution Control Plant