Water Pollution Control Plant
Monthly Report

CITY OF Painesville

JUNE 2012

OVERVIEW AND HIGHLIGHTS

During the month of June operational staff removed from service No. 4 aeration tank. The tank was cleaned and repairs were made to damaged diffuser heads. This is second aeration tank that has been serviced and cleaned. Once No. 4 aeration tank is placed online, No. 3 aeration tank will be cleaned and serviced for repairs.

The maintenance staff worked on a new electrical service to the polymer pump. In addition they placed a new work station in the blower building laboratory. New railing was fabricated for No. 1 anaerobic digester to prevent workers from falling into the tank. The automatic greaser for the Tertiary Screw Pump No. 1 was repaired and the screw pump was placed into service. A new hose reel was fabricated for the primary settling tank area. Operation of the belt filter press was delayed for a short period of time in June due to a failed panel module. Once the module was replaced, operation was returned to service.

WPCP MONTHLY STAFF MEETING AND DISCUSSION

WPCP Staff Meeting
Wednesday, June 27, 2012

1. Operations
   - New Work Station – construction on the new work station in the Blower Lab is nearing completion. Will have SCADA capability to monitor and control the plant operations
   - No. 5 Aeration Tank – Placed back into service after completing repairs to diffusers and tank drain
   - No. 4 Aeration Tank – Drained and cleaned, will be performing repairs to diffusers
   - Belt Press – Electrical problems to the press have been resolved. New module has solved the press operations. New dedicated electrical service to the polymer feed unit has been completed.
   - No. 1 Tertiary Screw Pump – The greaser to the No. 1 screw pump has been repaired and has been placed back into service.
   - Greenhouse – Operation of the greenhouse is being focused upon. Shift operators have to make sure that they run the tiller through the solids to advance the drying period of time.
   - Secondary Clarifier Fencing – Thanks to maintenance on completing the fencing around the secondary clarifiers.
2. Safety Training – CPR and AED Cards
3. July 4th Week – will need to use maintenance personnel in operational staff.
4. Laboratory Truck – Delivery in September.
5. City Auction – $3600 Pan Truck - $211 Aerostar Van
6. Layoffs – 4 part time clerical staff
7. 2013 Budget – Started on the 2013 Department Budget, Capital items include new plant water strainer, new doors and windows and new tri-axle dump truck.

JUNE EVENTS AND MEETINGS

1. On June 1, 2012 Randy Bruback met with Lynn White to review the phone expenditures for the Water Pollution Control Plant. Specifically we reviewed the ATT fees for the seven pump stations communicating with the main plant.
2. Randy Bruback presented to City Council a video review of the WPCP equipment improvements funded by the Water Pollution Control Loan Fund on Monday, June 4, 2012 in council chambers.
3. The Painesville "Image Committee" met on June 6, 2012 to discuss and review committee goals and accomplishments.
4. Jeff Tressel and Randy Bruback worked with CT Consultants in June on the NPDES Permit Renewal.
5. Ron Hardt, YKK Windows and Doors sales representative met with Randy Bruback on June 14, 2012 to review the application of new windows and doors for the WPCP.
6. Terry Haffey, Jeff Hannan, Bud Skaggs and Joe Jackson attended the Ohio Water Environment Annual Conference in Aurora, OH on June 20, 2012.
7. Randy Bruback, Joe Elliott, Jeff Tressel, David Sudbrook, James Boykin and Kevin Aiken attended the OWEA State Conference in Aurora, OH on June 21, 2012.
8. On June 21, 2012 public works repaired three asphalt areas at the WPCP.
9. Anthony Botirus, Engineering met with Randy Bruback to develop maps that outline the City of Painesville's 208 boundaries for sewer service on June 25, 2012.
10. The "Community Engagement Committee" met on June 26, 2012 to discuss goals and accomplishments.
11. Jeff Tressel and Randy Bruback met with CT Consultants on June 28, 2012 to discuss and review the progress of the new local limit development for industrial users of the City's sewerage system.

GOALS AND ACCOMPLISHMENTS

1. The City of Painesville held its annual vehicle auction in the month of June. The WPCP auctioned two vehicles, the pan truck and the industrial sampling van.
2. WPCP staff continued to work towards meeting the deadline for renewal of the plants NPDES permit renewal by July 31, 2012 with CT Consultants.
3. The 2.2 Megawatt plant generator has been operated per the Electric Plant requests in the past month to peak shave the City's load during high electrical usage periods successfully.

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	***This Month***		***Last Month***	
Avg. Daily Flow	2.02	MGD	2.31	MGD
Flow Treated	60.47	Mill. Gal.	71.75	Mill. Gal.
Raw PO	3.90	Mg/L	4.88	Mg/L
Final PO	0.92	Mg/L	0.75	Mg/L
% Removed	76.4	%	84.6	%
PO to River	0.232	Tons	0.224	Tons
Raw C-BOD	161	Mg/L	164	Mg/L
Final C-BOD	1	Mg/L	1	Mg/L
% Removed	99.4	%	99.4	%
C-BOD to River	0.25	Tons	0.30	Tons
Raw Suspended Solids	207	Mg/L	288	Mg/L
Final Suspended Solids	1	Mg/L	1	Mg/L
% Removed	993.5	%	99.7	%
Suspended Solids to River	0.25	Tons	0.30	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 60.47 million gallons flow. The Lubrizol meter recorded 3,763,190 gallons flow.

Detritors

1.05 tons of grit was removed during the month.

Comminutors

1.39 tons of screenings was removed during the month.

Chemical Treatment

17,900 pounds of alum was required at a cost of $2,685.00 for the removal of 1502.9 pounds of phosphorus. Cost of phosphorus removal for the month was $1.79/pound.

Primary Clarifiers

The primary clarifiers operated satisfactorily during the month, removing 507,297 gallons of raw sludge containing 3.6% solids.

Anaerobic Digesters

The primary digesters operated satisfactorily during the month, transferring 475,897 gallons of raw sludge for pressing containing 3.1 % solids.

Secondary Treatment

The secondary clarifiers operated satisfactorily during the month.

Tertiary Treatment

The tertiary filters operated satisfactorily during the month.

Hypo-chlorination

2,033 pounds of salt was used in the production of 685 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 1.85 mg/l CL2 and the minimum effluent residual was 1.37 mg/l CL2. Cost of chlorination for the month was $279.44 or $0.408 per pound of available CL2.

Dechlorination

810 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 $540.27.

Liquid Sludge

The filter press processed 490,597 gallons of liquid sludge producing 241.6 tons of wet cake including 14,700 gallons of water plant sludge containing 22.0% solids or 54.47 tons of dry solids. 800 pounds of polymer were used at a cost of $928.00. Cost of disposal at the Lake County Landfill was $7,321.20.

Pump Stations

Erie Street pumps recorded 64.50 hours and pumped 399,000 gallons of wastewater.

Fern Drive pumps recorded 39.70 hours and pumped 624,040 gallons of wastewater.

Poplar Lane pump recorded 101.00 hours and pumped 3,333,000 gallons of wastewater.

Jackson Street pump recorded 41.00 hours and pumped 750,300 gallons of wastewater.

Recreation Park pump recorded 52.60 hours and pumped 946,800 gallons of wastewater.

Sanford Street pump recorded 59.50 hours and pumped 892,500 gallons of wastewater.

Valley View pumps recorded 18.18 hours and pumped 196,344 gallons of wastewater.

Brookstone flow meter recorded 1,745,722 gallons of sewer flow.

The Seven (7) pump stations pumped 7,041,984 gallons of wastewater and 36 man-hours were required in maintenance.

Respectfully Submitted,

Randy Bruback
Superintendent
Water Pollution Control Plant