City of Port Washington Wastewater Utility 2013 Annual Report

Operations Performance Summary

The Wastewater Utility recorded a total annual influent plant flow of 506,850,000 gallons (+26.9 %)* in 2013. The average daily plant flow was 1.39 million gallons versus 1.09 million in 2012. There was no bypassing of flow during 2013. Total rainfall in 2013 was 39.4 inches (+34.8 %).

The plant Influent Biochemical Oxygen Demand (BOD) loading was 925,569 pounds (+ 13.7 %) for a daily average of 2536 pounds, or 219 mg/l. The WWTP has typically processed over 1 million pounds each year. The treatment plant reduced the BOD in the effluent to 55,313 pounds (+ 61.2 %) for the year and a daily average of 152 lbs, or 13 mg/l.

The plant Influent Suspended Solids (TSS) loading was 729,494 pounds (\pm 3.5 %), for a daily average of 1999 pounds, or 172 mg/l. The treatment plant reduced the yearly effluent TSS to 30,586 pounds(\pm 26.4 %), with a daily average of 84 pounds or 7 mg/l.

The plant influent phosphorus loading for the year was 17,675(+6.0 %) pounds for a daily average of 48 pounds or 4.1 mg/l. The treatment plant reduced the yearly effluent phosphorus to 2440 pounds(+24.7 %), with a daily average of 6.7 pounds or 0.58 mg/l. Phosphorus removal was achieved with 42,058 pounds (- 25.1 %) of iron from a ferrous chloride solution.

The City of Port Washington Wastewater Utility Wisconsin Pollutant Discharge Elimination System (WPDES) permit, calls for effluent limits of the above mentioned evaluating criteria to be:

Permit Limits	2013 discharges	% Removal
BOD - 30 mg/l	55,313 lbs.	94.0 %
TSS - 30 mg/l	30,586 lbs.	95.8 %
Phosphorus - 1.0 mg/l	2,440 lbs.	86.2 %

In 2013 the plant produced a total of 1,808,100 gallons (+ 21.3 %) of anaerobic sludge. All of this material was land applied and injected. Approximately 25% of sludge produced is land applied in the spring, the remainder is applied in the fall.

The Sewage Utility Rate did not increase in 2013 and no rate increases are planned for 2014.

Capital purchases for 2013 included; North Clarifier Rebuild (\$102,055), Replaced RAS flow meter)\$32,407, Sludge Storage Tank Valves Replacement (\$33,729), Digester 2 Gas pump replacement (\$ 16,835), Replaced VFD RAS pump (\$6,497), Replaced Influent Flow Meter (\$ 6,859), Replaced Scum pump level control (\$4,502), Stainless refuse pan Bar screen (\$2,031)

Major Plant and Collection System Repairs; Sludge Storage tanks internal coating repair (\$20,095), Lift Station 2 Grinder Rebuild (\$21,556), Replaced rotor/stator North sludge storage tank pump (\$11,210), Piping replacement

CITY OF PORT WASHINGTON

DEPARTMENT OF PUBLIC WORKS

WASTEWATER UTILITY

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Port Washington City Hall 100 West Grand Avenue P.O. Box 307 Port Washington, WI 53074-0307 methane line –digester 2 (\$3,531), Repaired service door North end admin. Building (\$2,813)

Revenue and Expense Summary

2013 Waste Hauler revenue for septage, holding tank, grease trap, landfill leachate, and other assorted wastewaters totaled \$276,122(+19.1%).

Additional information on revenues and expenses vs. the 2013 WWTP budget plan can be found in the final Revenue and Expense Report summary. At the time of writing this annual report that summary was not yet available. It most likely will be available by late March.

The Compliance Maintenance Annual Report (CMAR) which shows in greater detail the operational performance of the Wastewater Utility for 2013 will be forwarded to the DNR Plymouth Service Center, upon approval from the Board of Public Works and the City Council. The CMAR is available on May 31 with a June $30^{\rm th}$ submittal deadline.

SANITARY SEWER MAINTENANCE SUMMARY

Basic Sanitary Sewer Street Dept. Utility Repairs

- Whitefish and Wisconsin Replaced top 2 feet and rings.
- 229 North Spring Replaced top 2 feet casting, and installed bolt down cover.
- 1610 Aster Capped off sanitary service
- 1614 Pine Cone Trail Capped off sanitary service.

^{* (%)} Indicates % increase or decrease from 2012