

Department of Utilities Wastewater Treatment Plant 2006 E Newberry Street Appleton, WI 54915 920-832-5945 tel. 920-832-5949 fax

TO: Chairperson Greg Dannecker and Members of the Utilities Committee

CC: Utilities Director Chris Shaw

FROM: Environmental Programs Coordinator Brian Kreski

DATE: February 2, 2017

RE: 2016 Industrial Quality and Quantity (Q & Q) and Receiving Station

Year End Summaries

This memo serves as a summary and year-end revenue report for both the Industrial (i.e., Quality and Quantity) and Receiving Station Programs. The report identifies the program, the total waste to that program and the revenues generated.

Quantity and Quality Program:

The Appleton Wastewater Treatment Plant (AWWTP) did not experience large production increases or changes to the ten (10) permitted industries in 2016. Billings to Industry and the Receiving Station are based on pollutant strength and volume of waste. Table 1 lists the industrial loadings and revenue for 2016 and four prior years.

Table 1: Loading/Revenue Summary of Industrial Users since 2012

Year	Flow (MG)	BOD (lbs)	TSS (lbs)	Revenue
2012	635.95	3,303,954	15,809,647	\$4,074,024
2013	674.80	3,465,388	14,994,912	\$4,093,431
2014	643.57	4,308,519	13,459,520	\$4,167,492
2015	601.08	3,779,398	14,431,028	\$4,013,877
2016	611.45	2,941,272	14,289,331	\$3,722,026
5 Year Average	633.37	3,559,706	14,596,888	4,014,170

2016 Industrial Rate (Jan-Dec): Flow \$1.73/1,000 gal; BOD \$35.48/100 lbs; TSS \$11.26/100 lbs

Hauled Waste Program:

The AWWTP has been accepting hauled wastes from outside the Appleton sewer service area to offset community costs since 1999. The measure parameter used for pollutant strength is Total Suspended Solids (TSS) (table 3). The Receiving Station's loading and revenue increased in 2016 due to additional permitted material as well as unseasonable weather patterns which diverted material from land spreading activities to the AWWTP. Increased loading affects the biological treatment process and to sustain treatment there are direct costs from electrical, natural gas, and chemical usage. In 2010 a tier rate structure was adopted to allow the AWWTP to bill for treatment costs by pollutant strength and in July 2015 a 10% rate increase was approved and implemented (see table 3).

Table 2: Loadings & Revenues Summary for High and Low Receiving Station Wastes

	Headworks		Receiving Station			Total		
Year	Tons	Revenue	%*	Tons	Revenue	%*	Tons	Revenue
2010**	71,516	\$339,701	53%	31,505	\$303,521	47%	103,021	\$643,222
2011	51,171	\$239,512	45%	31,822	\$348,565	55%	82,984	\$588,077
2012	36,056	\$186,512	28%	50,729	\$480,388	72%	86,785	\$666,900
2013	51,782	\$245,965	38%	31,818	\$373,057	62%	94,135	\$643,934
2014	96,358	\$413,882	39%	59,959	\$636,198	61%	156,317	\$1,050,080
2015	159,538	\$1,047,315	77%	47,820	\$425,532	23%	207,359	\$1,473,124
2016	251,043	\$1,700,039	79%	49,986	\$461,401	21%	301,028	\$2,161,440
5-Year Average	118,955	\$718,743	52%	48,062	\$475,315	48%	169,125	\$1,199,040

^{*} Represents % of total yearly revenue.

Table 3: Tier Rate Structure

Tier (mg/l)	TSS (mg/l)	Rate (2010-2014)	Rate (July 2015-)
1	(<200)	\$4.75	\$5.25
2	(200-9,999)	\$6.60	\$7.30
3	(10,000-29,999)	\$10.80	\$12.00
4	(30,000-40,000)	\$15.00	\$16.50
5	(>40,000)	\$20.00	\$22.00

Summary:

The Industrial users and the Receiving Station program are both trending with increased revenues when compared to their five year averages. If you would like further information regarding these programs feel free to contact Environmental Programs Coordinator Brian Kreski at ph: 832-5945.

^{** 2010} first year of tier rate structure.