

City of Harrisburg
Department of Public Works



Advanced Wastewater Treatment Facility

BUREAU OF SEWERAGE
MONTHLY REPORT
OCTOBER 2011

PHOTO: Final Clarifiers before Sunrise.

GENERAL

During the month of October, the AWTF met all monthly average NPDES permit requirements. The hydraulic loading to the facility averaged 35.0 MGD while achieving removal reductions of 94.8 percent CBOD, 89.8 percent Suspended Solids, and 70.4 percent Phosphorus (Exhibit A).

Contained in the body of this report are significant events that have transpired since last reporting. Factual information can be found in the attached exhibits.

OPERATIONS

During the period of September 27, 2011 through October 27, 2011 the Number 1 or Number 2 Enginator operated a total of 77 percent of the time for an average daily kWh output of 5,516 or a total production of 171,000 kWh. October revenue is anticipated to be approximately \$13,680.00 (Exhibit D).

Included in this report is flow information collected by ADS equipment and other monitoring devices. Data collected through October 2011 is presented in Exhibit B with flow in million gallons per day (MGD) broken down into Total, City, Suburbs and ten (10) drainage regions.

During the month of October, a total of 2,155,100 gallons of waste were delivered by the contract waste haulers to the AWTF (Exhibit G). Income, for the same period, amounted to \$51,738.30 (Exhibit G).

OCTOBER ACCOMPLISHMENTS

Operations:

- Experienced a major power loss at the Settled Sewage Pump Station. A short in the electrical panel for Sewage Pump Number 2 tripped the station's Main Breaker. An emergency service call was placed and the station was functional again in less than three hours.
- Shut down and tagged out the Effluent Water Pumping System due to a break in the supply line at the Harrisburg Resource Recovery Facility.
- Attempted to correct problems with the new Velodyne Hydromax Polymer Feed System. Several troubleshooting attempts were unsuccessful. Dry polymer is currently being fed into batch system by hand to prevent interruption of the dewatering process. The system is still under warranty and replacement parts have been ordered at no cost.
- Hosed and cleaned the Control Building Basement, Return Sludge Pump Station, and the Chemical Building Compressor Room.
- Unclogged several blockages in the Gorman Rupp Pumps, Classifiers and collection lines at the Grit Removal System.

- Administered a plant tour to an Environmental Science class from Penn State-Harrisburg.
- Continued night and weekend monitoring of the Sidestream Treatment and UNOX Pilot Trailers.

Laboratory

- Performed influent, effluent and biosolids local limits testing to include bi-monthly sampling and testing of biosolids for pollutants and fecal coliform as required by our beneficial reuse (PAG08) permit.
- Performed Form 43 biosolids testing required for landfilling
- Performed weekly nutrient sampling and testing of our influent and effluent as required by our NPDES permit.
- Performed additional testing for the BNR pilot study.
- Performed a data audit of the AWTF laboratory's daily analysis work sheets.

Industrial Waste Program

- Reviewed self monitoring reports submitted for September and the third quarter 2011.
- Completed the annual Industrial Waste Pretreatment Program self monitoring inspections at Ames True Temper Incorporated, the Hershey Creamery Company and the Swatara Township Landfill.
- Completed Contract Waste Hauling and Pretreatment laboratory report preparation, and Quickbooks billing.
- Collected ADS flow monitoring data and updated the exhibit for the AWTF's monthly report.
- Issued Contract Waste Hauler permits and renewal letters.

Maintenance

- Rebuilt the rotating assembly and replaced the peristaltic hose in Sludge Pump Number 1 for the Belt Filter Press in the basement of the Control Building.
- Repaired the Dewalt High Pressure Washer in the Garage of the Belt Filter Press Building.

- Replaced the bearing assembly, seal, and coupling on the hot water circulating pump for the heat in the Main Laboratory.
- Repaired the door hinge assembly on the Blue M Drying Oven in the Main Laboratory.
- Removed and replaced the pipe to remove blockage from the rag removal system at the Front Street Pump Station.
- Removed debris repeatedly from the four Gorman Rupp Pumps for the Grit Removal System.
- Replaced the battery in the dump trailer in the Grit Removal Garage.
- Replaced the sump pump in the basement of the Primary Digester Control House.
- Replaced the coupling on Sludge Pump Number 3 in the Return Sludge Pump Station.
- Replaced the bearings and seals in the four channel monster motors that were damaged because of flooding at the Spring Creek Pump Station.
- Replaced the sump pump in the basement of the Spring Creek Pump Station.

Field Maintenance:

- Cleaned the scum off the siphon basins on the Paxton Creek Chambers.
- Cut grass and weeds at CSO Chambers and manholes along the Front Street, Paxton Creek, Hemlock, and Spring Creek Interceptors.
- Flushed the siphon lines for CSO Number 048.
- Removed rags and debris from CSO Chambers Numbers 024, 033, 034, 041, 048, and 061.
- Removed 98.1 tons of debris from the Grit Lagoon.
- Replaced the overflow detection device at CSO Chambers Number 012.
- Replaced the linkage rod on the float assembly at CSO Chamber Number 055.
- Vactored the drain trough and manhole at Sludge Storage Building Number 2.
- Vactored 12.92 tons of debris from Grit Removal Chamber Number 1.
- Vactored, washed down, and inspected CSO Chambers Number 028, 030, 031, 032, 033, 037, 042, 043, 048, and 055.

NOVEMBER GOALS

- Repair the dry polymer screw feeder for the Belt Filter Presses.
- Repair the electric panel for Sewage Pump Number 2 in the Settled Sewage Pump Station.
- Complete the annual Industrial Waste Pretreatment Program self monitoring inspections at Norfolk Southern Corporation's Harrisburg Yard and Orograin Bakeries Manufacturing, Inc.
- Complete the third quarter significant noncompliance evaluations.
- Issue Contract Waste Hauler permits and renewal letters.
- Continue the second series of semi-annual industrial user compliance sampling.
- Perform bi-monthly sampling and testing of biosolids for pollutants and fecal coliform as required by our beneficial reuse (PAG08) permit.
- Create employee shift schedule for 2012 before vacation canvassing begins on December 1.

EXHIBIT A

CITY OF HARRISBURG
ADVANCED WASTEWATER TREATMENT FACILITY

Process Control - 2011

Parameters	January	February	March	April	May	June	July	August	September	October	November	December	Average	NPDES Limits
Volume, MGD	16.5	23.7	38.0	41.3	37.5	24.7	20.5	29.4	46.8	35.0			31.3	37.7
Carbonaceous Biochemical Oxygen Demand														
Influent, mg/l	192	136	89	71	82	118	138	101	61	116			110	-----
Effluent, mg/l	17	22	16	10	6	5	5	5	6	6			10	25
Percent Removal, %	91.1	83.8	82.0	85.9	92.7	95.8	96.4	95.0	90.2	94.8			90.8	-----
Effluent Loading, lb/d	2,288	4,333	4,804	3,323	2,015	1,053	861	1,202	2,319	1,776			2,397	7,860
Suspended Solids:														
Influent, mg/l	207	164	111	91	109	162	172	130	105	146			140	-----
Effluent, mg/l	41	54	40	21	13	9	11	10	20	11			23	30
Percent Removal, %	80.2	67.0	64.0	76.9	88.1	94.4	93.6	92.3	81.0	89.8			82.7	-----
Effluent Loading, lb/d	5,547	10,480	11,996	7,158	4,251	1,802	1,879	2,462	8,500	3,350			5,743	9,433
Nitrogen														
Total-N														
Influent, mg/l	27	24	15	12	13	19	36	19	10	18			19	-----
Effluent, mg/l	30	23	16	12	12	15	19	14	8	12			16	Monitor
Effluent Loading, lb/d	4,197	4,169	4,452	4,168	3,824	2,954	3,151	3,239	3,532	3,451			3,714	-----
NH3-N														
Influent mg/l	16	12	8	7	9	13	13	11	5	10			10	-----
Effluent, mg/l	21	16	10	8	10	13	15	10	4	8			12	17 (2)
Effluent Loading, lb/d	2,931	3,013	2,732	2,512	2,799	2,724	2,505	2,144	1,456	2,107			2,492	4,716
Phosphorus:														
Influent, mg/l	4.4	3.1	2.1	1.9	2.2	3.0	3.4	2.5	1.7	2.7			2.7	-----
Effluent, mg/l	1.6	1.5	1.3	0.9	1.0	1.3	1.3	0.8	0.6	0.8			1.1	2.0
Percent Removal, %	63.6	51.6	38.1	52.6	54.5	56.7	61.8	68.0	64.7	70.4			58.2	-----
Effluent Loading, lb/d	213	285	371	281	299	261	216	193	212	209			254	629
pH:														
Influent, Std. Units	7.3	7.3	7.2	7.2	7.2	7.3	7.2	7.3	7.1	7.3			7.2	-----
Effluent, Std. Units	7.0	7.0	7.0	6.9	6.9	6.9	6.9	6.8	6.7	6.8			6.9	6.0 - 9.0
Dissolved Oxygen:														
Effluent Minimum, mg/l	8.6	7.5	8.8	7.2	6.8	7.4	6.4	5.8	6.2	6.9			7.2	5.0 Min.
Fecal Coliform:														
Effluent, No./100 ml	13	24	87	49	9	7	5	21	36	100			35	200/100 ml (1)
Chlorine Residual:														
Effluent, mg/l	0.19	0.19	0.25	0.27	0.38	0.39	0.38	0.38	0.40	0.21			0.30	0.50

(1) Seasonal limit 2,000/100 ml Oct. 1 to Apr. 30 and 200/100 ml May 1 to Sept. 30.

(2) Seasonal Limit May 1 to Nov. 1.

EXHIBIT B

CITY OF HARRISBURG
ADVANCED WASTEWATER TREATMENT FACILITY

Flow Monitoring Information, MGD - 2011

Month	Total Flow	City Regions					Suburb Regions					Total Precip inches	
		1	2	3	4	5	6	7	8	9	10		
January	16,500	6,690	5,091	0,112	0,152	1,014	0,321	1,818	2,648	1,797	3,411	0,136	1,530
February	23,700	9,695	7,159	0,187	0,168	1,860	0,321	2,070	3,410	2,559	5,758	0,208	2,780
March	38,000	13,130	8,799	0,462	1,516	1,626	0,727	2,856	6,278	6,965	8,286	0,485	6,440
April	41,300	17,160	12,257	0,408	1,109	1,973	1,413	3,171	6,685	5,232	8,575	0,477	11,320
May	37,500	16,309	11,845	0,528	0,520	2,491	0,925	3,084	5,396	3,341	7,588	1,782	4,900
June	24,700	11,541	8,816	0,336	0,419	1,583	0,387	2,367	3,799	2,041	4,570	0,382	4,260
July	20,500	9,320	7,854	0,254	0,194	0,670	0,348	1,888	3,538	1,964	3,805	0,165	6,050
August	29,400	12,314	4,267	0,257	1,120	6,228	0,442	2,079	4,185	3,358	7,248	0,216	9,780
September	46,800	17,647	5,752	0,070	1,602	9,385	0,858	3,895	7,235	5,761	10,480	1,782	17,220
October	35,000	15,683	10,957	0,380	0,520	3,404	0,442	2,609	4,966	3,140	6,820	1,782	5,940
November													
December													
Average	31.34	12.95	18.39										7.02
Percent	100.00	41.32	58.68										70.22

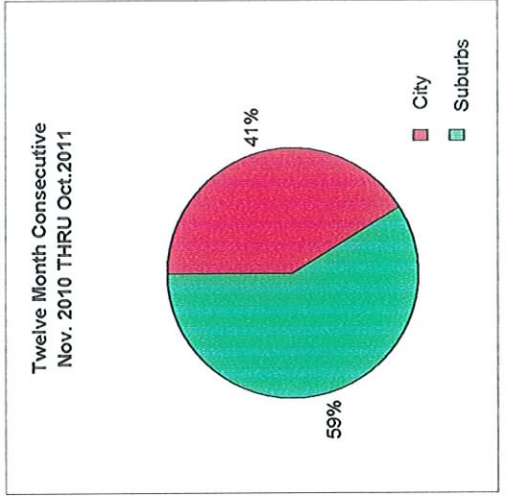
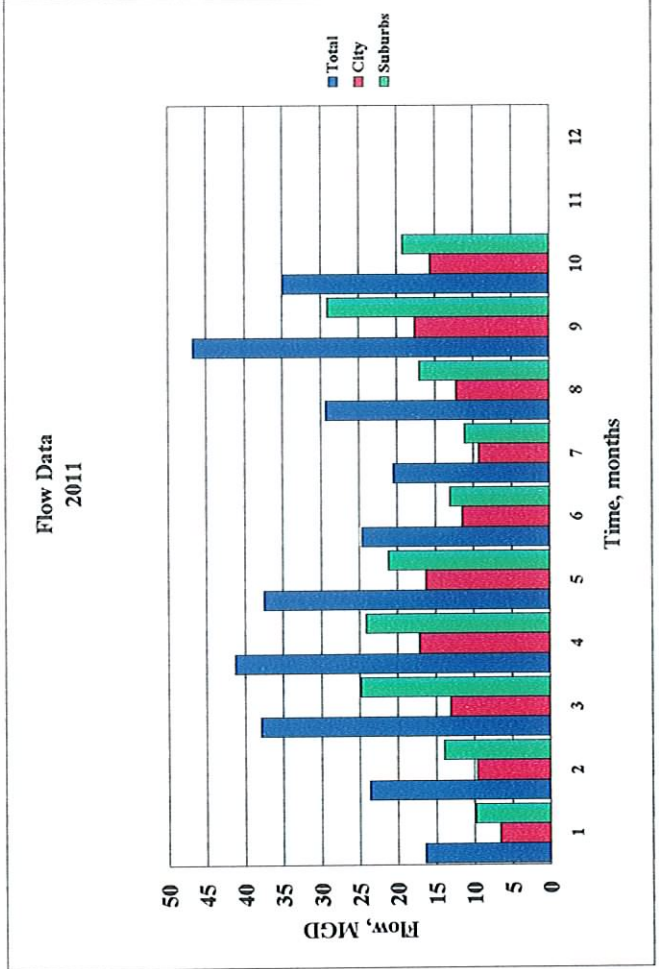


EXHIBIT C

CITY OF HARRISBURG
ADVANCED WASTEWATER TREATMENT FACILITY

Treatment Utility and Chemical Usage - 2011

Utility / Chemical	January	February	March	April	May	June	July	August	September	October	November	December	Average	Total
Electric														
Total, kWh	1,020,700	903,900	961,700	984,000	1,056,800	1,048,200	1,088,400	934,800	1,013,400	1,196,700			1,020,860	10,208,600
Average, kWh/Day	32,926	32,282	31,023	32,800	34,090	34,940	35,110	30,155	33,780	38,603			33,571	-----
Cost, Dollars	\$88,624.90	\$106,553.66	\$95,510.54	\$91,387.17	\$79,994.58	\$79,902.20	\$83,136.86	\$72,109.75	\$75,770.59	\$90,771.77			\$86,376.20	\$863,762.02
Fuel Oil														
Total, Gals.	0	0	0	0	0	0	0	0	0	0			0	0
Average, Gals./Day	0	0	0	0	0	0	0	0	0	0			0	-----
Cost, Dollars	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			\$0.00	\$0.00
Natural Gas														
Total, Cu Ft	824.5	532.0	362.7	144.8	13.9	22.3	11.7	3.8	29.3	*			195	1,945
Average, Cu Ft/Day	29.5	19.0	11.7	4.8	0.4	0.7	0.4	0.1	1.0	*			8	-----
Cost, Dollars	\$13,476.15	\$6,472.96	\$3,513.90	\$1,489.62	\$236.45	\$312.05	\$211.46	\$147.05	\$356.46	*			\$2,621.61	\$26,216.10
Water														
Total, Gal.	661,000	696,000	665,000	923,000	575,000	638,000	638,000	599,000	538,000	*			659,222	5,033,000
Average, Gal./Day	21,323	24,857	21,452	30,767	18,548	21,267	20,581	19,323	17,933	*			21,783	-----
Cost, Dollars	\$5,939.33	\$6,140.58	\$5,962.33	\$7,445.83	\$5,444.83	\$5,807.08	\$5,807.08	\$5,582.83	\$5,232.08	*			\$5,336.20	\$53,361.97
Chlorine Disinfection														
Total, Lbs.	7,525	7,785	10,714	10,080	10,860	9,300	8,820	12,802	15,875	7,360			10,112	101,121
Average, Lbs./Day	243	278	346	336	350	310	285	413	529	237			333	-----
Avg Residual, mg/l	0.18	0.18	0.25	0.27	0.38	0.39	0.38	0.38	0.40	0.21			0.30	-----
Cost, \$/Lbs.	\$0.33	\$0.33	\$0.33	\$0.33	\$0.33	\$0.33	\$0.33	\$0.33	\$0.33	\$0.33			\$0.33	-----
Total Cost, Dollars	\$2,445.63	\$2,530.13	\$3,482.05	\$3,276.00	\$3,529.50	\$3,022.50	\$2,866.50	\$4,160.65	\$5,159.38	\$2,392.00			\$3,286.43	\$32,864.33
Phosphorous Removal														
Total FeSO ₄ , Gals.	44,032	28,918	10,750	9,181	0	0	15,115	18,563	4,425	0			13,098	130,983
Avg FeSO ₄ , Gals./Day	1,420	1,033	347	306	0	0	488	599	148	0			434	-----
FeSO ₄ Cost, \$/Gal.	\$0.54	\$0.54	\$0.54	\$0.54	\$0.54	\$0.54	\$0.54	\$0.54	\$0.54	\$0.54			\$0.54	-----
FeSO ₄ Total Cost, Dollars	\$23,865.34	\$15,673.29	\$5,826.50	\$4,975.83	\$0.00	\$0.00	\$8,192.06	\$10,061.15	\$2,398.35	\$0.00			\$7,099.25	\$70,992.52

* No data at time of report

EXHIBIT E

CITY OF HARRISBURG
ADVANCED WASTEWATER TREATMENT FACILITY

Sludge Handling Information - 2011

Process	January	February	March	April	May	June	July	August	September	October	November	December	Average	Total
Solids Removal														
Process, Lbs.	927,425	962,537	910,551	910,551	910,551	797,841	790,955	929,620	868,162	791,948			879,994	8,799,942
CWH Program, Lbs.	241,180	223,240	188,119	97,257	127,320	173,423	138,434	74,920	45,780	128,300			143,797	1,437,973
Total Solids, Lbs.	1,168,605	1,185,577	1,098,670	1,174,839	1,202,753	971,264	929,389	1,004,540	913,942	920,248			1,056,983	10,569,828
Sludge Dewatering														
Feed Volume, Gals.	2,744,000	2,524,000	3,943,000	3,522,000	3,785,000	3,602,000	5,251,000	4,212,000	3,345,000	2,662,000			3,559,000	35,590,000
Feed Solids, %	1.9	2.0	2.5	2.2	2.6	2.0	1.8	2.3	3.1	3.0			2.3	-
Labor, Hours	371	339	435	416	426	344	523	383	345	278			386	3,860
Operations, Hours	543	551	793	737	846	627	1,031	748	687	550			711	7,113
Total Cake, Dry Tons	137	155	269	186	278	192	322	232	261	189			189	2,221
Total Cake, Wet Tons	821	882	1,435	962	1,236	951	1,677	1,159	1,126	864			1,111	11,113
Cake TS, %	17.0	17.6	19.0	19.3	22.5	20.2	19.2	20.0	23.2	21.9			20.0	-
Press Rate, Lbs./Hour	3,024	3,204	3,618	2,613	2,923	3,032	3,253	3,100	3,280	3,140			3,119	31,186
Polymer Dosage, Lbs	3,511	3,213	4,966	3,766	4,539	4,163	6,927	4,142	4,192	3,530			4,295	42,949
Polymer Dosage, Lbs/Dry Ton	25.6	20.7	18.4	20.3	16.3	21.6	21.5	17.9	16.0	18.7			19.7	-
Disposal Cost														
Labor, Dollars	\$7,121.01	\$6,513.66	\$8,351.09	\$8,001.29	\$8,187.72	\$6,613.60	\$10,052.06	\$7,361.26	\$6,638.59	\$5,345.08			\$7,418.54	\$74,185.36
Electrical, Dollars	\$238.92	\$242.26	\$348.96	\$324.15	\$372.24	\$276.01	\$453.60	\$329.12	\$302.06	\$242.18			\$312.95	\$3,129.50
Polymer, Dollars	\$6,565.57	\$6,007.38	\$9,286.16	\$7,042.98	\$8,488.29	\$7,992.19	\$13,300.61	\$7,953.02	\$8,048.64	\$6,777.60			\$8,146.24	\$81,462.44
Disposal, Dollars	\$33,289.72	\$42,005.00	\$79,317.00	\$44,598.00	\$19,888.99	\$24,192.19	\$36,814.54	\$42,407.24	\$14,580.82	\$30,816.39			\$36,790.99	\$367,909.89
Total Cost, Dollars	\$47,215.22	\$54,768.30	\$97,303.21	\$59,966.42	\$36,937.24	\$39,074.00	\$60,620.80	\$58,050.64	\$29,570.11	\$43,181.25			\$52,668.72	\$526,687.18
Cost Per Dry Ton, Dollars	\$344.64	\$352.83	\$361.18	\$322.98	\$132.98	\$203.18	\$188.45	\$250.74	\$113.19	\$228.47			\$27.16	-

CITY OF HARRISBURG
ADVANCED WASTEWATER TREATMENT FACILITY

Conveyance Utility Usage - 2011

Location / Utility	January	February	March	April	May	June	July	August	September	October	November	December	Average	Total
Front Street Pump Station														
Electric														
Total, kWh	76,800	88,800	175,800	147,000	196,800	118,800	82,800	117,600	198,000	200,400			140,280	1,402,800
Average, kWh/Day	2,477	3,171	5,671	4,900	6,348	3,960	2,671	3,794	6,600	6,465			4,606	-----
Cost, Dollars	\$7,059.87	\$10,034.43	\$16,812.63	\$13,977.46	\$15,045.12	\$9,549.00	\$7,529.54	\$9,578.00	\$15,602.80	\$15,513.96			\$12,070.28	\$120,702.81
Fuel Oil														
Total, Gals.	0	0	0	0	0	0	0	0	0	0			0	0
Average, Gals./Day	0	0	0	0	0	0	0	0	0	0			0	-----
Cost, Dollars	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			\$0.00	\$0.00
Water														
Total, Gals.	5,000	5,000	5,000	55,000	40,000	10,000	5,000	15,000	71,737	*			23,526	211,737
Average, Gal./Day	161	179	161	1,833	1,290	333	161	484	2,391	*			777	-----
Cost, Dollars	\$474.28	\$474.28	\$474.28	\$761.78	\$675.53	\$503.03	\$474.28	\$531.78	\$858.02	*			\$580.81	\$5,227.26
Spring Creek Pump Station														
Electric														
Total, kWh	35,840	36,160	54,400	65,600	94,400	62,400	47,680	37,760	80,640	86,720			60,160	601,600
Average, kWh/Day	1,156	1,291	1,755	2,187	3,045	2,080	1,538	1,218	2,688	2,797			1,976	-----
Cost, Dollars	\$3,449.58	\$5,225.15	\$7,197.07	\$7,860.14	\$8,715.21	\$5,990.21	\$3,642.89	\$3,642.89	\$7,384.51	\$8,097.73			\$6,260.18	\$62,601.76
Fuel Oil														
Total, Gals.	0	0	0	0	0	0	0	0	0	0			0	0
Average, Gals./Day	0	0	0	0	0	0	0	0	0	0			0	-----
Cost, Dollars	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			\$0.00	\$0.00
Water														
Total, Gals.	53,000	22,000	1,000	0	1,000	1,000	0	1,000	50,000	*			14,333	129,000
Average, Gal./Day	1,710	786	32	0	32	33	0	32	1,667	*			477	-----
Cost, Dollars	\$353.36	\$175.11	\$54.36	\$48.61	\$54.36	\$54.36	\$48.61	\$54.36	\$336.11	*			\$131.03	\$1,179.24
Market Street Pump Station														
Electric														
Total, kWh	10,920	11,280	7,200	6,600	5,520	2,280	1,800	1,920	1,800	2,400			5,172	51,720
Average, kWh/Day	353	403	232	220	178	76	58	62	60	77			172	-----
Cost, Dollars	\$1,032.95	\$1,404.94	\$756.26	\$893.73	\$754.55	\$435.90	\$177.29	\$314.55	\$414.17	\$420.18			\$660.45	\$6,604.52
Fuel Oil														
Total, Gals.	0	0	0	0	0	0	0	0	0	0			0	0
Average, Gals./Day	0	0	0	0	0	0	0	0	0	0			0	-----
Cost, Dollars	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			\$0.00	\$0.00
City Island Pump Station														
Electric														
Total, kWh	680	640	640	560	600	680	680	600	600	160			584	5,840
Average, kWh/Day	22	23	21	19	19	23	22	19	20	5			19	-----
Cost, Dollars	\$83.39	\$97.74	\$99.89	\$156.43	\$184.51	\$82.04	78.89	\$73.16	\$71.76	\$130.28			\$105.81	\$1,058.09

* No Data at time of report

EXHIBIT G

CITY OF HARRISBURG
ADVANCED WASTEWATER TREATMENT FACILITY

Contract Waste Hauling Program 2010 - 2011

Month	Process		Septic		Total	
	Gallons	Revenue	Gallons	Revenue	Gallons	Revenue
January	1,067,100	\$50,472.30	59,100	\$2,127.60	1,126,200	\$52,599.90
February	1,328,500	\$63,740.10	17,000	\$612.00	1,345,000	\$64,352.10
March	2,160,100	\$78,015.30	71,800	\$2,584.80	2,231,900	\$80,600.10
April	1,567,500	\$46,314.00	144,800	\$5,212.80	1,712,300	\$51,526.80
May	1,020,600	\$48,610.80	100,800	\$3,628.80	1,121,400	\$52,239.60
June	1,401,200	\$72,730.80	155,000	\$5,580.00	1,556,200	\$78,310.80
July	1,264,950	\$66,506.25	117,350	\$4,224.60	1,382,300	\$70,730.85
August	1,675,300	\$75,141.00	117,550	\$4,231.80	1,792,850	\$79,372.80
September	1,252,400	\$59,003.10	129,400	\$4,658.40	1,381,800	\$63,661.50
October	2,387,300	\$89,448.30	129,200	\$4,651.20	2,516,500	\$94,099.50
November	1,883,400	\$68,918.10	54,000	\$1,944.00	1,937,400	\$70,862.10
December	1,427,200	\$69,126.00	13,100	\$471.00	1,440,300	\$69,597.60
Total - 2010	18,435,550	\$788,026.05	1,109,100	\$39,927.00	19,544,150	\$827,953.65
Monthly Average - 2010	1,536,296	\$65,668.84	92,425	\$3,327.25	1,628,679	\$68,996.14
January	1,057,200	\$60,045.60	25,000	\$900.00	1,082,200	\$60,945.60
February	809,000	\$47,724.00	10,000	\$360.00	819,000	\$48,084.00
March	1,797,400	\$54,335.40	0	\$0.00	1,797,400	\$54,335.40
April	1,324,600	\$29,827.80	29,500	\$1,062.00	1,354,100	\$30,889.80
May	1,662,500	\$38,160.00	54,700	\$1,969.20	1,717,200	\$40,129.20
June	2,090,800	\$51,300.00	121,800	\$4,384.80	2,212,600	\$55,684.80
July	1,500,750	\$46,357.50	157,700	\$5,434.20	1,658,450	\$51,791.70
August	411,100	\$14,995.80	140,025	\$4,747.52	551,125	\$19,743.32
September	688,325	\$17,745.30	13,600	\$309.60	701,925	\$18,054.90
October	2,075,200	\$47,888.10	79,900	\$3,850.20	2,155,100	\$51,738.30
November						
December						
Total - 2011	13,416,875	\$408,379.50	632,225	\$23,017.52	14,049,100	\$431,397.02
Monthly Average - 2011	1,341,688	\$40,837.95	63,223	\$2,301.75	1,404,910	\$43,139.70

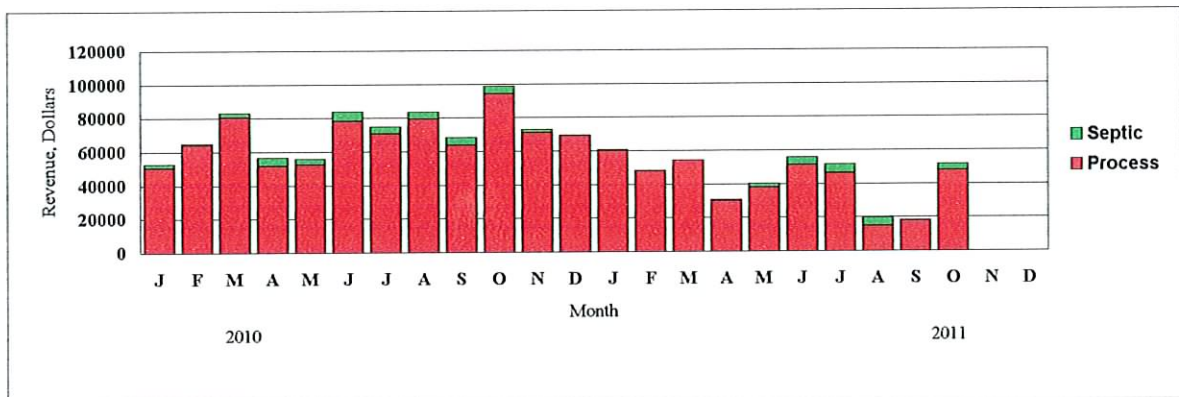


Exhibit H
CITY OF HARRISBURG
ADVANCED WASTEWATER TREATMENT FACILITY

	Jan - Sep 11	Budget	\$ Over Budget
Income			
2900 · Income			
350 · Interest Income			
350002 · Interest Savings - Con/Treat	2,166.93	1,450.00	716.93
350003 · Interest Savings - Collection	431.35	250.00	181.35
352002 · Interest Other - Con/Treat	0.16	600.00	-599.84
352003 · Interest Other-Collection	0.00	100.00	-100.00
Total 350 · Interest Income	2,598.44	2,400.00	198.44
369 · Sewerage Utility Fund			
369002 · Conveyance/Treatment Revenue	3,537,454.57	5,143,000.00	-1,605,545.43
369003 · Collection System Revenue	619,494.96	928,000.00	-308,505.04
369005 · Sales of Scrap	105.30	400.00	-294.70
369008 · Sales to Public Authorities	5,862,425.90	7,943,746.00	-2,081,320.10
369010 · Sludge Handling Charges	477,470.00	370,000.00	107,470.00
369011 · Sales of Electric Power	297,987.48	150,000.00	147,987.48
369012 · Contract Waste Hauling Charges	1,500.00	2,000.00	-500.00
369013 · Pretreatment Charges	7,950.00	8,100.00	-150.00
369014 · Contract Waste Hauling Lab Fees	18,154.00	29,000.00	-10,846.00
369015 · Pretreatment Lab Fees	14,300.25	18,000.00	-3,699.75
369053 · Liens Principal - Convey/Treat	17,619.78	20,700.00	-3,080.22
369054 · Liens Interest - Convey/Treat	4,374.17	4,000.00	374.17
369055 · Liens Principal - Collection	3,507.05	4,100.00	-592.95
369056 · Liens Interest - Collection	870.69	900.00	-29.31
Total 369 · Sewerage Utility Fund	10,863,214.15	14,621,946.00	-3,758,731.85
Total 2900 · Income	10,865,812.59	14,624,346.00	-3,758,533.41
Total Income	10,865,812.59	14,624,346.00	-3,758,533.41
Gross Profit	10,865,812.59	14,624,346.00	-3,758,533.41
Expense			
2910 · Administration			
414 · Salaries and Wages			
1414000 · Wages - Hourly Employees	169,123.23	248,698.00	-79,574.77
1416000 · Overtime	808.30	920.00	-111.70
1417000 · Sick Leave Buyback	3,345.14	3,400.00	-54.86
Total 414 · Salaries and Wages	173,276.67	253,018.00	-79,741.33
419 · Fringe Benefits			
1419001 · Social Security	14,305.25	20,939.00	-6,633.75
1419002 · Blue Cross/Shield	81,580.05	125,029.00	-43,448.95
1419005 · Severance Pay	16,073.49	20,373.49	-4,300.00
1419010 · Unemployment	0.00	8,000.00	-8,000.00
1419011 · Workers' Compensation	1,650.00	2,000.00	-350.00
1419012 · Loss Time / Medical @ WC	4,971.15	41,000.00	-36,028.85
1419014 · State Fees @ Workers' Comp.	0.00	1,300.00	-1,300.00
1419015 · Excess Insurance Policy @ WC	0.00	4,000.00	-4,000.00
Total 419 · Fringe Benefits	118,579.94	222,641.49	-104,061.55
420 · Communications			
1420010 · Advertising & Public Notices	839.53	1,500.00	-660.47
1420020 · Printing Reproducing & Report	5,660.74	6,269.00	-608.26
1420040 · Telephone	5,013.05	15,500.00	-10,486.95
1420050 · Postage	623.65	750.00	-126.35
Total 420 · Communications	12,136.97	24,019.00	-11,882.03
421 · Professional Fees			
1421020 · Audit Fees	0.00	21,930.00	-21,930.00
1421030 · Consulting	0.00	10,900.00	-10,900.00
1421040 · Collection	0.00	1,500.00	-1,500.00
1421050 · Professional Fees/Other	80,000.00	90,000.00	-10,000.00
Total 421 · Professional Fees	80,000.00	124,330.00	-44,330.00

Exhibit H
CITY OF HARRISBURG
ADVANCED WASTEWATER TREATMENT FACILITY

	Jan - Sep 11	Budget	\$ Over Budget
423 - Insurance			
1423002 - Stop/Loss Premium	15,298.98	25,600.00	-10,301.02
1423010 - Automobile	13,892.28	19,000.00	-5,107.72
1423011 - Auto Insurance Deductible	0.00	9,400.00	-9,400.00
1423020 - General Liability	25,075.83	50,000.00	-24,924.17
1423040 - Property	96,273.78	128,376.05	-32,102.27
1423041 - Property Deductible	0.00	6,926.51	-6,926.51
1423050 - Inland Marine	10,614.45	30,000.00	-19,385.55
1423060 - Flood (Property & Crime)	63,830.00	100,000.00	-36,170.00
1423090 - Public Official Liability	40,473.27	41,294.26	-820.99
1423095 - Excess Liability	9,591.69	13,000.00	-3,408.31
1423097 - Terrorism	0.00	6,700.00	-6,700.00
Total 423 - Insurance	275,050.28	430,296.82	-155,246.54
425 - Maintenance			
1425090 - Maintenance Service Contract	29,896.13	30,768.84	-872.71
Total 425 - Maintenance	29,896.13	30,768.84	-872.71
429 - Other Contracted Services			
1429001 - Tuition for Employee Training	0.00	500.00	-500.00
1429003 - Interfund - General Admin.	2,513,752.00	3,018,507.00	-504,755.00
1429009 - Pension Fund Admin. Charge	0.00	120.00	-120.00
1429012 - Laundry & Dry Clean	9,916.82	10,000.00	-83.18
1429016 - Conferences	89.15	200.00	-110.85
1429017 - Membership Dues	0.00	100.00	-100.00
1429025 - CAT Event Disaster Recovery	9,583.56	9,583.56	0.00
1429095 - Bank Service Charge	4,554.11	6,000.00	-1,445.89
Total 429 - Other Contracted Services	2,537,895.64	3,045,010.56	-507,114.92
430 - Supplies and Expenses			
1430002 - Software & Licenses	16,000.00	16,000.00	0.00
1430003 - Subscriptions, Periodicals	0.00	300.00	-300.00
1430008 - Data Processing Supplies	0.00	200.00	-200.00
1430009 - Office Supplies	2,719.37	2,750.00	-30.63
Total 430 - Supplies and Expenses	18,719.37	19,250.00	-530.63
449 - Authority Payments			
1449030 - Transfer To Authority - Rental	1,714,676.36	2,286,442.00	-571,765.64
1449031 - Pennvest	266,608.68	338,294.08	-71,685.40
Total 449 - Authority Payments	1,981,285.04	2,624,736.08	-643,451.04
Total 2910 - Administration	5,226,840.04	6,774,070.79	-1,547,230.75
2920 - Operations			
414 - Salaries and Wages - Operations			
2414000 - Wages-Hourly Employees	635,819.99	867,828.00	-232,008.01
2416000 - Overtime	141,988.07	220,030.17	-78,042.10
Total 414 - Salaries and Wages - Operations	777,808.06	1,087,858.17	-310,050.11
419 - Fringe Benefits			
2419001 - Social Security	59,502.39	83,221.00	-23,718.61
2419002 - Blue Cross/Blue Shield	124,486.29	265,316.00	-140,829.71
Total 419 - Fringe Benefits	183,988.68	348,537.00	-164,548.32
422 - Utilities and Service			
2422010 - Water	49,504.85	115,000.00	-65,495.15
2422020 - Electricity	701,106.69	961,319.00	-260,212.31
2422030 - Heat	72,159.90	125,604.00	-53,444.10
2422090 - Garbage & Refuse Removal	703,012.90	831,610.00	-128,597.10
Total 422 - Utilities and Service	1,525,784.34	2,033,533.00	-507,748.66
424 - Rental			
2424060 - Other	0.00	1,176.00	-1,176.00
Total 424 - Rental	0.00	1,176.00	-1,176.00
425 - Maintenance and Repairs			
2425080 - Service Contracts	159,811.00	160,000.00	-189.00
2425090 - Maintenance Service Contract	0.00	21,000.00	-21,000.00
2425099 - Other Contracted Maint & Repair	49,665.35	30,500.00	19,165.35
Total 425 - Maintenance and Repairs	209,476.35	211,500.00	-2,023.65

Exhibit H
CITY OF HARRISBURG
ADVANCED WASTEWATER TREATMENT FACILITY

	Jan - Sep 11	Budget	\$ Over Budget
429. · Contracted Services			
2429003 · General Admin. Charges	2,662,168.03	3,193,188.00	-531,019.97
Total 429. · Contracted Services	2,662,168.03	3,193,188.00	-531,019.97
430. · Supplies and Expenses			
2430011 · Custodial Supplies	5,000.00	8,000.00	-3,000.00
2430012 · Personnel Safety Supplies	0.00	1,000.00	-1,000.00
2430016 · Medical Surgical & Lab Supplies	80,208.25	82,000.00	-1,791.75
2430037 · Chemicals	414,680.10	419,000.00	-4,319.90
2430099 · Miscellaneous	0.00	412,500.00	-412,500.00
Total 430. · Supplies and Expenses	499,888.35	922,500.00	-422,611.65
Total 2920 · Operations	5,859,113.81	7,798,292.17	-1,939,178.36
2930 · Maintenance			
414.. · Wages and Salary			
3414000 · Wages-Hourly Employees	288,963.77	417,476.00	-128,512.23
3416000 · Overtime	5,852.06	6,025.00	-172.94
Total 414.. · Wages and Salary	294,815.83	423,501.00	-128,685.17
419.. · Fringe Benefits			
3419001 · Social Security	22,553.37	32,400.00	-9,846.63
3419002 · Blue Cross/Blue Shield	60,070.44	136,640.00	-76,569.56
Total 419.. · Fringe Benefits	82,623.81	169,040.00	-86,416.19
425.. · Maintenance and Repairs			
3425010 · Vehicle Equipment	10,100.00	10,100.00	0.00
3425060 · Operations Equipment	1,500.00	3,500.00	-2,000.00
Total 425.. · Maintenance and Repairs	11,600.00	13,600.00	-2,000.00
429.. · Contracted Service			
3429003 · General Admin. Charges	504,087.15	605,847.00	-101,759.85
3429090 · Miscellaneous	5,910.00	8,900.00	-2,990.00
Total 429.. · Contracted Service	509,997.15	614,747.00	-104,749.85
430.. · Supplies and Expenses			
3430012 · Personal Safety Supplies	0.00	0.00	0.00
3430030 · Snow/Ice Control Supplies	0.00	0.00	0.00
3430036 · Building & Construction Supplie	0.00	1,500.00	-1,500.00
3430040 · Botanical	0.00	0.00	0.00
3430042 · Expendable Tools & Hardware	3,000.00	5,000.00	-2,000.00
3430045 · Utility Plant, Fuels, Lubricant	9,478.00	15,000.00	-5,522.00
3430050 · Motor Fuels & Lubricants	16,224.37	16,500.00	-275.63
3430051 · Tires & Batteries	1,010.12	2,600.00	-1,589.88
3430052 · Vehicle Parts & Supplies	1,426.37	8,500.00	-7,073.63
3430055 · Mechanical Equipmt-Parts & Supp	184,640.24	185,000.00	-359.76
3430057 · Pipe Connection Etc	13,000.00	13,000.00	0.00
3430099 · Misc. Supplies & Expenses	29,270.09	30,700.00	-1,429.91
Total 430.. · Supplies and Expenses	258,049.19	277,800.00	-19,750.81
457.. · Sewer Plant Equipment			
3457000 · Plant Equipment	56,548.68	61,600.00	-5,051.32
Total 457.. · Sewer Plant Equipment	56,548.68	61,600.00	-5,051.32
Total 2930 · Maintenance	1,213,634.66	1,560,288.00	-346,653.34
2940 · Field Maintenance			
414... · Wages and Salary - Fd. Main.			
4414000 · Wages Hourly Employees	125,294.67	174,570.00	-49,275.33
4416000 · Overtime	15,873.26	18,821.48	-2,948.22
Total 414... · Wages and Salary - Fd. Main.	141,167.93	193,391.48	-52,223.55
419... · Fringe Benefits			
4419001 · Social Security	10,799.28	14,795.00	-3,995.72
4419002 · Blue Cross/Blue Shield	28,058.08	55,856.00	-27,797.92
Total 419... · Fringe Benefits	38,857.36	70,651.00	-31,793.64
420... · Printing & Reproduction			
4420020 · Printing Repro & Report	0.00	0.00	0.00
Total 420... · Printing & Reproduction	0.00	0.00	0.00

Exhibit H
CITY OF HARRISBURG
ADVANCED WASTEWATER TREATMENT FACILITY

	Jan - Sep 11	Budget	\$ Over Budget
422.. · Utilities			
4422010 · Water	5,407.87	10,000.00	-4,592.13
4422020 · Electricity	231,021.47	233,411.00	-2,389.53
4422030 · Heat	0.00	1,000.00	-1,000.00
4422090 · Garbage and Refuse	0.00	1,000.00	-1,000.00
Total 422.. · Utilities	236,429.34	245,411.00	-8,981.66
425... · Maintenance and Repairs			
4425010 · Vehicular Equipment	4,445.00	6,000.00	-1,555.00
4425099 · Other Contracted Maint/Repairs	0.00	1,000.00	-1,000.00
Total 425... · Maintenance and Repairs	4,445.00	7,000.00	-2,555.00
429... · Contracted Services			
4429003 · General Admin. Charges	378,858.21	457,844.00	-78,985.79
Total 429... · Contracted Services	378,858.21	457,844.00	-78,985.79
430... · Supplies and Expenses			
4430012 · Personal Safety Supplies	0.00	250.00	-250.00
4430037 · Chemicals	0.00	200.00	-200.00
4430042 · Tools & Hardware	0.00	200.00	-200.00
4430050 · Motor Fuels/Lubricants	3,500.00	3,500.00	0.00
4430051 · Tires & Batteries	200.00	200.00	0.00
4430052 · Vehicle Parts & Supplies	2,614.66	4,250.00	-1,635.34
4430055 · Mechanical Equipment P & S	3,000.00	6,000.00	-3,000.00
Total 430... · Supplies and Expenses	9,314.66	14,600.00	-5,285.34
Total 2940 · Field Maintenance	809,072.50	988,897.48	-179,824.98
Total Expense	13,108,661.01	17,121,548.44	-4,012,887.43
Net Income	<u>-2,242,848.42</u>	<u>-2,497,202.44</u>	<u>254,354.02</u>