

City of Harrisburg
Department of Public Works



Advanced Wastewater Treatment Facility

BUREAU OF SEWERAGE
MONTHLY REPORT
SEPTEMBER 2011

PHOTO: Rainbow over Secondary Digesters.

GENERAL

During the month of September, the AWTF met all monthly average NPDES permit requirements, with the exception of one excursion of the weekly average limitation for mass solids loading. The excursion was a result of hydraulic overload to the facility due to heavy rains and flooding of the Susquehanna River. The average influent flow for September of 46.8 MGD was the highest on record at the AWTF. Removal reductions of 90.5 percent CBOD, 81.0 percent Suspended Solids, and 64.7 percent Phosphorus were achieved (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 August 27, 2011 through September 27, 2011 the Number 1 or Number 2 Enginotor operated a total of 53 percent of the time for an average daily kWh output of 3,510 or a total production of 105,300 kWh. September revenue is anticipated to be approximately \$8,424.00 (Exhibit D).

Included in this report is flow information collected by ADS equipment and other monitoring devices. Data collected through September 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 September, a total of 701,925 gallons of waste were delivered by the contract waste haulers to the AWTF (Exhibit G). Income, for the same period, amounted to \$18,054.90 (Exhibit G).

SEPTEMBER ACCOMPLISHMENTS

Operations:

- The AWTF staff took extensive measures to mitigate potential damage to facility assets from the heavy flooding of the Susquehanna River in early September. These efforts were an overwhelming success. Disruptions to the treatment process were largely minimized. Property damage was limited to:
 - Spring Creek Pumping Station – Due to its elevation, the station took extensive flooding to its two basement levels. Damages to electrical components, control panels, and some equipment are still being assessed. Damage to the station's most costly components, three large pump motors, was negated by removal in advance of the river crest.
 - Embankment Erosion – The flooding of Spring Creek resulted in the erosion of an embankment which now encroaches upon the facility's main access road.
 - Property at Front Street Pumping Station – The sidewalk around the station was damaged and is in need of replacement. The station itself operated without interruption.

- CSO 055 at Front and Locust – The high flood waters resulted in erosion of the embankment and concrete stairs to the river walk near CSO 55 and caused the collapse of the combined sewer overflow discharge line.
- Assisted AECOM Inc. with the Chemically Enhanced Primary and Secondary Treatment studies to determine the potential benefits of full scale implementation.
- Continued night and weekend monitoring of the Sidestream Treatment and UNOX Pilot Trailers.
- Removed several grit and debris blockages from the cyclone pieces on the classifiers for the Grit Removal System.

Laboratory

- Completed the second series of semi-annual industrial user compliance sampling at Harrisburg Dairies, Inc., the Hershey Creamery Company, the New Morgan Municipal Authority and the Norfolk Southern Corporation (Harrisburg Yard).
- As required for maintaining laboratory accreditation under 25 PA Code, Section 252(f)(10)(i) and (ii), issued memorandum to laboratory personnel requiring verification and documentation of the volumetric accuracy of all non-class A labware used to measure sample volume.
- 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 August 2011.
- Completed the annual Industrial Waste Pretreatment Program self monitoring inspections at the Electronic Service and Design Corporation, Harrisburg Materials, Energy, Refuse and Recycling Facility and Harrisburg Dairies, Inc.
- 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:

- Isolated both City Island Pump Stations because of flood conditions and put both back in service when river receded.
- Replaced both starters and battery leads on Enginotor Number 2 in the Co-generation Building.
- Repaired a water leak in the Control Building basement by the Primary Sludge Pumps.
- Replaced the heating element in the autoclave and repaired the water purifier in the Laboratory.
- Rewired the controller for the dump trailer for the Degritter Building.
- Repaired Barscreen Number 2 at the Front Street Pump Station.
- Replaced the drive chain and belt splice on the conveyor for the rag removal system at the Front Street Pump Station.
- Replaced the drive motor coupling on the hydraulic cabinet for the rag removal system at the Front Street Pump Station.
- Replaced the hinges on the fuel storage cabinet on the outside of the Maintenance Garage.
- Removed debris repeatedly from the four Gorman Rupp Pumps for the Grit Removal System.
- Repaired the water leak at the uniflange on Grit Tank Number 1.
- Replaced the control module and cable for the scale at the Sludge Pad.
- Removed the three 250 horsepower raw sewage pump motors because of flood conditions and replaced after water receded at the Spring Creek Pump Station.
- Replaced the four channel monster motors that were damaged because of flooding at 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.
- Assisted Plant Maintenance with the removal and replacement of the three 250 horsepower motors at the Spring Creek Pump Station due to flooding conditions.
- Flushed the siphon lines for CSO Number 025, 026, and 048.
- Removed rags and debris from CSO Chambers Numbers 008, 033, 048, and 055.

- Replaced the overflow detection devices at CSO Chambers Number 005, 008, 011, 017, and 056.
- Vactored, washed down, and inspected CSO Chambers Number 034 and 048.

OCTOBER GOALS

- Continue the second series of semi-annual industrial user compliance sampling.
- Perform 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.
- Perform Form 43 biosolids testing required for landfilling.
- Complete the annual Industrial Waste Pretreatment Program self monitoring inspections at Ames True Temper Incorporated, the Hershey Creamery Company and the Swatara Township Landfill.
- Issue Contract Waste Hauler permits and renewal letters.
- Rebuild the rotating assembly on the Number 1 Sludge Pump for the Belt Filter Presses.
- Repair the electric contactors for the Number 1-1 and 3-1 Mixers on the Oxygenation Tanks.

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				30.9	37.7
Carbonaceous Biochemical Oxygen Demand														
Influent, mg/l	192	136	89	71	82	118	138	101	63				110	----
Effluent, mg/l	17	22	16	10	6	5	5	5	6				10	25
Percent Removal, %	91.1	83.8	82.0	85.9	92.7	95.8	96.4	95.0	90.5				90.4	----
Effluent Loading, lb/d	2,288	4,333	4,804	3,323	2,015	1,053	861	1,202	2,282				2,462	7,860
Suspended Solids:														
Influent, mg/l	207	164	111	91	109	162	172	130	105				139	----
Effluent, mg/l	41	54	40	21	13	9	11	10	20				24	30
Percent Removal, %	80.2	67.0	64.0	76.9	88.1	94.4	93.6	92.3	81.0				81.9	----
Effluent Loading, lb/d	5,547	10,480	11,996	7,158	4,251	1,802	1,879	2,462	8,500				6,008	9,433
Nitrogen														
Total-N														
Influent, mg/l	27	24	15	12	13	19	36	19	8				19	----
Effluent, mg/l	30	23	16	12	12	15	19	14	7				16	Monitor
Effluent Loading, lb/d	4,197	4,169	4,452	4,168	3,824	2,954	3,151	3,239	2,316				3,608	----
NH3-N														
Influent mg/l	16	12	8	7	9	13	13	11	5				10	----
Effluent, mg/l	21	16	10	8	10	13	15	10	4				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				2,535	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	----
Effluent, mg/l	1.6	1.5	1.3	0.9	1.0	1.3	1.3	0.8	0.6				1.1	2.0
Percent Removal, %	63.6	51.6	38.1	52.6	54.5	56.7	61.8	68.0	64.7				56.9	----
Effluent Loading, lb/d	213	285	371	281	299	261	216	193	212				259	629
pH:														
Influent, Std. Units	7.3	7.3	7.2	7.2	7.2	7.3	7.2	7.3	7.1				7.2	----
Effluent, Std. Units	7.0	7.0	7.0	6.9	6.9	6.9	6.9	6.8	6.7				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				7.2	5.0 Min.
Fecal Coliform:														
Effluent, No./100 ml	13	24	87	49	9	7	5	21	36				28	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				0.31	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	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	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	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	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	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	0,336	0,419	1,583	0,387	2,367	3,799	2,041	4,570	0,382	4,260
July	20,500	9,331	0,265	0,194	1,888	0,348	1,888	3,358	1,953	3,805	0,165	6,050
August	29,400	12,263	0,206	1,120	6,228	0,442	2,079	4,185	3,409	7,248	0,216	9,780
September	46,800	17,848	0,271	1,602	9,385	0,838	3,895	7,235	5,560	10,480	1,782	17,220
October												
November												
December												
Average	30.93	12.66	18.27									
Percent	100.00	40.94	59.06									

7.14
64.28

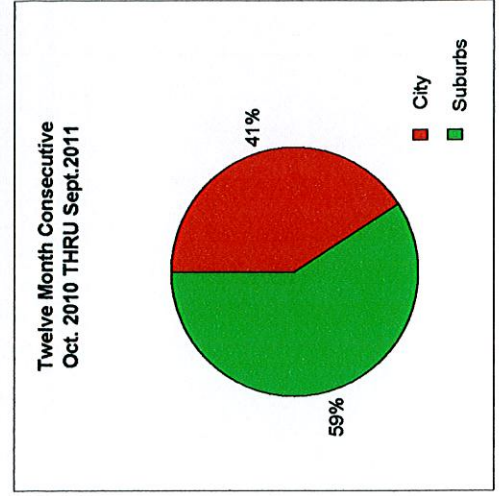
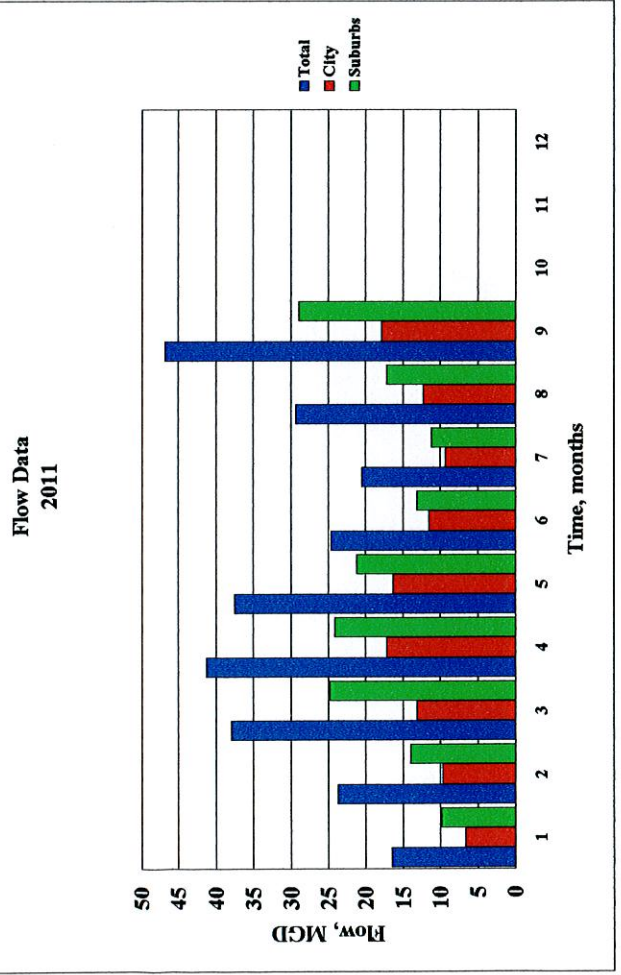


EXHIBIT C

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				1,001,322	9,011,900
Average, kWh/Day	32,926	32,282	31,023	32,800	34,090	34,940	35,110	30,155	33,780				33,012	*****
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	\$75,594.66				\$85,868.26	\$772,814.32
Fuel Oil														
Total, Gals.	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
Natural Gas														
Total, Cu Ft	824.5	532.0	362.7	144.8	13.9	22.3	11.7	3.8	*				213	1,916
Average, Cu Ft/Day	29.5	19.0	11.7	4.8	0.4	0.7	0.4	0.1	*				8	*****
Cost, Dollars	\$13,476.15	\$6,472.96	\$3,513.90	\$1,489.62	\$236.45	\$312.05	\$211.46	\$147.05	*				\$2,873.29	\$23,859.64
Water														
Total, Gal.	661,000	696,000	665,000	923,000	575,000	638,000	638,000	599,000	*				674,375	5,395,000
Average, Gal./Day	21,323	24,857	21,452	30,767	18,548	21,267	20,581	19,323	*				22,265	*****
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	*				\$5,347.77	\$48,129.89
Chlorine Disinfection														
Total, Lbs.	7,525	7,785	10,714	10,080	10,860	9,300	8,820	12,802	15,875				10,418	93,761
Average, Lbs./Day	243	278	346	336	350	310	285	413	529				343	*****
Avg Residual, mg/l	0.18	0.18	0.25	0.27	0.38	0.39	0.38	0.38	0.40				\$0.33	*****
Cost, \$/Lbs.	\$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				\$3,385.81	\$30,472.33
Phosphorous Removal														
Total FeSO4, Gals.	44,032	28,918	10,750	9,181	0	0	15,115	18,563	4,425				14,554	130,983
Avg FeSO4, Gals./Day	1,420	1,033	347	306	0	0	488	599	148				482	*****
FeSO4 Cost, \$/Gal.	\$0.54	\$0.54	\$0.54	\$0.54	\$0.54	\$0.54	\$0.54	\$0.54	\$0.54				\$0.54	*****
FeSO4 Total Cost, Dollar	\$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				\$7,888.06	\$70,992.52

* No data at time of report

EXHIBIT D

CITY OF HARRISBURG
ADVANCED WASTEWATER TREATMENT FACILITY

Cogeneration Electrical Production: 2010 - 2011

Period	Percent Run Time	Daily Avg Kilowatt	Kilowatt Hours Produced	Revenue Collected
Dec 29th - Jan 29th, 2010	85	7,177	222,500	\$32,485.00
Jan 29th - Feb 28th, 2010	62	5,329	149,200	\$21,783.20
Feb 28th - Mar 29th, 2010	77	5,832	180,790	\$26,395.34
Mar 29th - Apr 29th, 2010	75	5,467	164,000	\$23,944.00
Apr 29th - May 30th, 2010	100	8,058	249,800	\$36,470.80
May 30th - Jun 27th, 2010	79	6,890	206,700	\$30,178.20
Jun 27th - Jul 27th, 2010	59	3,945	122,300	\$17,855.80
Jul 27th - Aug 27th, 2010	49	2,335	72,400	\$10,570.40
Aug 27th - Sep 27th, 2010	38	1,750	52,500	\$7,665.00
Sep 27th - Oct 27th, 2010	31	1,961	60,800	\$8,876.80
Oct 27th - Nov 29th, 2010	52	3,230	96,900	\$14,147.40
Nov 29th - Dec 29th, 2010	36	2,506	77,700	\$11,344.20
Total - 2010	743	54,480	1,655,590	\$241,716.14
Monthly Average - 2010	62	4,540	137,966	\$20,143.01
Dec 29th - Jan 29th, 2011	87	6,594	204,400	\$19,961.70
Jan 29th - Feb 28th, 2011	90	7,082	198,300	\$19,365.98
Feb 28th - Mar 29th, 2011	58	4,397	136,300	\$13,311.06
Mar 29th - Apr 29th, 2011	70	4,567	137,000	\$13,379.42
Apr 29th - May 30th, 2011	56	3,890	120,600	\$11,777.80
May 30th - Jun 27th, 2011	95	6,150	184,500	\$14,760.00
Jun 27th - Jul 27th, 2011	87	5,458	169,200	\$13,536.00
Jul 27th - Aug 27th, 2011	70	4,094	126,900	\$10,152.00
Aug 27th - Sep 27th, 2011	53	3,510	105,300	\$8,424.00
Sep 27th - Oct 27th, 2011				
Oct 27th - Nov 29th, 2011				
Nov 29th - Dec 29th, 2011				
Total - 2011	666	45,741	1,382,500	\$124,667.96
Monthly Average - 2011	74	5,082	153,611	\$13,852.00

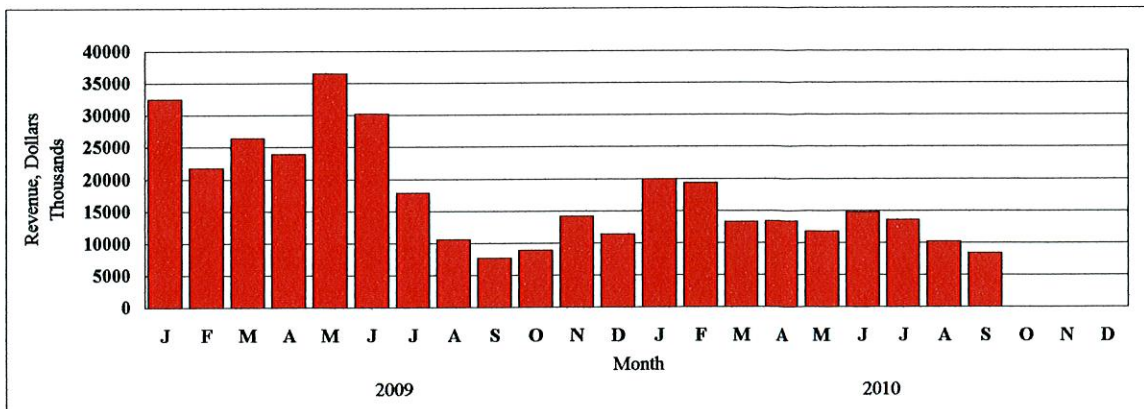


EXHIBIT E

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	962,337	910,551	910,551	910,551	797,841	790,955	929,620	868,162				889,777	8,007,994
CWH Program, Lbs.	241,180	223,240	188,119	97,257	127,320	173,423	138,434	74,920	45,780				145,519	1,309,673
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				1,072,175	9,649,579
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				3,658,667	32,928,000
Feed Solids, %	1.9	2.0	2.5	2.2	2.6	2.0	1.8	2.3	3.1				2.3	-
Labor, Hours	371	339	435	416	426	344	523	383	345				398	3,582
Operations, Hours	543	551	793	737	846	627	1,031	748	687				729	6,562
Total Cake, Dry Tons	137	155	269	186	278	192	322	232	261				226	2,032
Total Cake, Wet Tons	821	882	1,435	962	1,236	951	1,677	1,159	1,126				1,139	10,249
Cake TS, %	17.0	17.6	19.0	19.3	22.5	20.2	19.2	20.0	23.2				19.8	-
Press Rate, Lbs./Hour	3,024	3,204	3,618	2,613	2,923	3,032	3,253	3,100	3,280				3,116	28,046
Polymer Dosage, Lbs	3,511	3,213	4,966	3,766	4,539	4,163	6,927	4,142	4,192				4,380	39,419
Polymer Dosage, Lbs/Dry Ton	25.6	20.7	18.4	20.3	16.3	21.6	21.5	17.9	16.0				19.8	-
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				\$7,648.92	\$68,840.27
Electrical, Dollars	\$238.92	\$242.26	\$348.96	\$324.15	\$372.24	\$276.01	\$453.60	\$329.12	\$302.06				\$320.81	\$2,887.32
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				\$8,298.32	\$74,684.84
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	\$14,581.75				\$37,454.94	\$337,094.43
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	\$29,571.04				\$53,722.98	\$483,506.86
Cost Per Dry Ton, Dollars	\$344.64	\$352.83	\$361.18	\$322.98	\$132.98	\$203.18	\$188.45	\$250.74	\$113.19				\$237.97	

EXHIBIT F

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	*				125,550	1,004,400
Average, kWh/Day	2,477	3,171	5,671	4,900	6,348	3,960	2,671	3,794	*				4,124	----
Cost, Dollars	\$7,059.87	\$10,034.43	\$16,812.63	\$13,977.46	\$15,045.12	\$9,549.00	\$7,529.54	\$16,142.35	*				\$12,018.80	\$96,150.40
Fuel Oil														
Total, Gals.	0	0	0	0	0	0	0	0	0				0	0
Average, Gals./Day	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
Water														
Total, Gals.	5,000	5,000	5,000	55,000	40,000	10,000	5,000	15,000	*				17,500	140,000
Average, Gal./Day	161	179	161	1,833	1,290	333	161	484	*				575	----
Cost, Dollars	\$474.28	\$474.28	\$474.28	\$761.78	\$675.53	\$503.03	\$474.28	\$531.78	*				\$546.16	\$4,369.24
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				\$7,209	\$14,880
Average, kWh/Day	1,156	1,291	1,755	2,187	3,045	2,080	1,538	1,218	2,688				1,884	----
Cost, Dollars	\$3,449.58	\$5,225.15	\$7,197.07	\$7,860.14	\$8,715.21	\$5,990.21	\$5,039.47	\$3,642.89	\$7,384.31				\$6,056.00	\$54,504.03
Fuel Oil														
Total, Gals.	0	0	0	0	0	0	0	0	0				0	0
Average, Gals./Day	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
Water														
Total, Gals.	53,000	22,000	1,000	0	1,000	1,000	0	1,000	*				9,875	79,000
Average, Gal./Day	1,710	786	32	0	32	33	0	32	*				328	----
Cost, Dollars	\$353.36	\$175.11	\$54.36	\$48.61	\$54.36	\$54.36	\$48.61	\$54.36	*				\$105.39	\$843.13
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				5,480	49,320
Average, kWh/Day	353	403	232	220	178	76	58	62	60				182	----
Cost, Dollars	\$1,032.95	\$1,404.94	\$756.26	\$893.73	\$754.55	\$435.90	\$177.29	\$314.55	\$410.02				\$686.69	\$6,180.19
Fuel Oil														
Total, Gals.	0	0	0	0	0	0	0	0	0				0	0
Average, Gals./Day	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
City Island Pump Station														
Electric														
Total, kWh	680	640	640	560	600	680	680	600	600				631	5,680
Average, kWh/Day	22	23	21	19	19	23	22	19	20				21	----
Cost, Dollars	\$83.39	\$97.74	\$99.89	\$156.43	\$184.51	\$82.04	\$78.89	\$73.16	\$71.76				\$103.09	\$927.81

* 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						
November						
December						
Total - 2011	11,341,675	\$360,491.40	552,325	\$19,167.32	11,894,000	\$379,658.72
Monthly Average - 2011	1,260,186	\$40,054.60	61,369	\$2,129.70	1,321,556	\$42,184.30

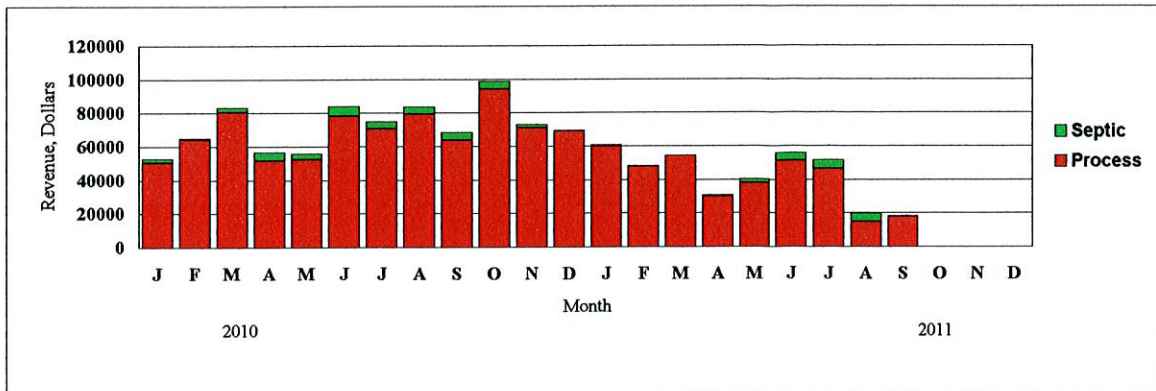


Exhibit H
CITY OF HARRISBURG
ADVANCED WASTEWATER TREATMENT FACILITY

	Jan - Aug 11	Budget	\$ Over Budget
Income			
2900 - Income			
350 - Interest Income			
350002 - Interest Savings - Con/Treat	2,043.87	1,450.00	593.87
350003 - Interest Savings - Collection	406.85	250.00	156.85
352002 - Interest Other - Con/Treat	0.14	600.00	-599.86
352003 - Interest Other-Collection	0.00	100.00	-100.00
Total 350 - Interest Income	<u>2,450.86</u>	<u>2,400.00</u>	<u>50.86</u>
369 - Sewerage Utility Fund			
369002 - Conveyance/Treatment Revenue	3,074,826.02	5,143,000.00	-2,068,173.98
369003 - Collection System Revenue	538,125.68	928,000.00	-389,874.32
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	446,469.18	370,000.00	76,469.18
369011 - Sales of Electric Power	297,987.48	150,000.00	147,987.48
369012 - Contract Waste Hauling Charges	1,400.00	2,000.00	-600.00
369013 - Pretreatment Charges	7,050.00	8,100.00	-1,050.00
369014 - Contract Waste Hauling Lab Fees	16,061.00	29,000.00	-12,939.00
369015 - Pretreatment Lab Fees	14,202.50	18,000.00	-3,797.50
369053 - Liens Principal - Convey/Treat	15,815.77	20,700.00	-4,884.23
369054 - Liens Interest - Convey/Treat	3,993.57	4,000.00	-6.43
369055 - Liens Principal - Collection	3,147.96	4,100.00	-952.04
369056 - Liens Interest - Collection	794.94	900.00	-105.06
Total 369 - Sewerage Utility Fund	<u>10,282,405.30</u>	<u>14,621,946.00</u>	<u>-4,339,540.70</u>
Total 2900 - Income	<u>10,284,856.16</u>	<u>14,624,346.00</u>	<u>-4,339,489.84</u>
Total Income	<u>10,284,856.16</u>	<u>14,624,346.00</u>	<u>-4,339,489.84</u>
Gross Profit	<u>10,284,856.16</u>	<u>14,624,346.00</u>	<u>-4,339,489.84</u>
Expense			
2910 - Administration			
414 - Salaries and Wages			
1414000 - Wages - Hourly Employees	145,456.90	248,698.00	-103,241.10
1416000 - Overtime	192.91	320.00	-127.09
1417000 - Sick Leave Buyback	3,345.14	3,400.00	-54.86
Total 414 - Salaries and Wages	<u>148,994.95</u>	<u>252,418.00</u>	<u>-103,423.05</u>
419 - Fringe Benefits			
1419001 - Social Security	12,447.75	20,939.00	-8,491.25
1419002 - Blue Cross/Shield	76,229.70	125,029.00	-48,799.30
1419005 - Severance Pay	16,073.49	16,073.49	0.00
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	<u>111,372.09</u>	<u>218,341.49</u>	<u>-106,969.40</u>
420 - Communications			
1420010 - Advertising & Public Notices	839.53	1,000.00	-160.47
1420020 - Printing Reproducing & Report	5,660.74	6,269.00	-608.26
1420040 - Telephone	4,647.19	16,000.00	-11,352.81
1420050 - Postage	595.01	750.00	-154.99
Total 420 - Communications	<u>11,742.47</u>	<u>24,019.00</u>	<u>-12,276.53</u>
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	<u>80,000.00</u>	<u>124,330.00</u>	<u>-44,330.00</u>

Exhibit H
CITY OF HARRISBURG
ADVANCED WASTEWATER TREATMENT FACILITY

	Jan - Aug 11	Budget	\$ Over Budget
423 - Insurance			
1423002 - Stop/Loss Premium	13,425.62	25,600.00	-12,174.38
1423010 - Automobile	13,892.28	19,000.00	-5,107.72
1423011 - Auto Insurance Deductible	0.00	10,000.00	-10,000.00
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)	83,830.00	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	11,000.00	-11,000.00
Total 423 - Insurance	273,176.92	435,196.82	-162,019.90
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.	2,263,752.00	3,018,507.00	-754,755.00
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	4,036.13	6,000.00	-1,963.87
Total 429 - Other Contracted Services	2,287,377.66	3,045,010.56	-757,632.90
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	248,854.84	338,294.08	-89,439.24
Total 449 - Authority Payments	1,963,531.20	2,624,736.08	-661,204.88
Total 2910 - Administration	4,924,810.79	6,774,070.79	-1,849,260.00
2920 - Operations			
414 - Salaries and Wages - Operations			
2414000 - Wages-Hourly Employees	549,083.43	867,828.00	-318,744.57
2416000 - Overtime	111,685.99	220,030.17	-108,344.18
Total 414 - Salaries and Wages - Operations	660,769.42	1,087,858.17	-427,088.75
419 - Fringe Benefits			
2419001 - Social Security	50,548.87	83,221.00	-32,672.13
2419002 - Blue Cross/Blue Shield	116,320.71	265,316.00	-148,995.29
Total 419 - Fringe Benefits	166,869.58	348,537.00	-181,667.42
422 - Utilities and Service			
2422010 - Water	36,836.05	115,000.00	-78,163.95
2422020 - Electricity	554,792.47	961,319.00	-406,526.53
2422030 - Heat	71,826.39	125,604.00	-53,777.61
2422090 - Garbage & Refuse Removal	703,012.90	831,610.00	-128,597.10
Total 422 - Utilities and Service	1,366,467.81	2,033,533.00	-667,065.19
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 - Aug 11	Budget	\$ Over Budget
429. · Contracted Services			
2429003 · General Admin. Charges	2,392,168.03	3,193,188.00	-801,019.97
Total 429. · Contracted Services	2,392,168.03	3,193,188.00	-801,019.97
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	414,681.11	419,000.00	-4,318.89
2430099 · Miscellaneous	0.00	412,500.00	-412,500.00
Total 430. · Supplies and Expenses	499,889.36	922,500.00	-422,610.64
Total 2920 · Operations	5,295,640.55	7,798,292.17	-2,502,651.62
2930 · Maintenance			
414.. · Wages and Salary			
3414000 · Wages-Hourly Employees	252,640.62	417,476.00	-164,835.38
3416000 · Overtime	1,802.49	6,025.00	-4,222.51
Total 414.. · Wages and Salary	254,443.11	423,501.00	-169,057.89
419.. · Fringe Benefits			
3419001 · Social Security	19,464.87	32,400.00	-12,935.13
3419002 · Blue Cross/Blue Shield	56,324.98	136,640.00	-80,315.02
Total 419.. · Fringe Benefits	75,789.85	169,040.00	-93,250.15
425.. · Maintenance and Repairs			
3425010 · Vehicle Equipment	9,805.50	10,100.00	-294.50
3425060 · Operations Equipment	1,500.00	3,500.00	-2,000.00
Total 425.. · Maintenance and Repairs	11,305.50	13,600.00	-2,294.50
429.. · Contracted Service			
3429003 · General Admin. Charges	454,087.15	605,847.00	-151,759.85
3429090 · Miscellaneous	5,910.00	8,900.00	-2,990.00
Total 429.. · Contracted Service	459,997.15	614,747.00	-154,749.85
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	15,220.31	16,500.00	-1,279.69
3430051 · Tires & Batteries	1,010.12	2,600.00	-1,589.88
3430052 · Vehicle Parts & Supplies	1,414.50	8,500.00	-7,085.50
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	12,015.49	30,700.00	-18,684.51
Total 430.. · Supplies and Expenses	239,778.66	277,800.00	-38,021.34
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	1,097,862.95	1,560,288.00	-462,425.05
2940 · Field Maintenance			
414... · Wages and Salary - Fd. Main.			
4414000 · Wages Hourly Employees	107,522.73	174,570.00	-67,047.27
4416000 · Overtime	10,149.74	18,821.48	-8,671.74
Total 414... · Wages and Salary - Fd. Main.	117,672.47	193,391.48	-75,719.01
419... · Fringe Benefits			
4419001 · Social Security	9,001.89	14,795.00	-5,793.11
4419002 · Blue Cross/Blue Shield	26,192.88	55,856.00	-29,663.12
Total 419... · Fringe Benefits	35,194.77	70,651.00	-35,456.23
420... · Printing & Reproduction			
4420020 · Printing Repro & Report	0.00	1,000.00	-1,000.00
Total 420... · Printing & Reproduction	0.00	1,000.00	-1,000.00

Exhibit H
CITY OF HARRISBURG
ADVANCED WASTEWATER TREATMENT FACILITY

	<u>Jan - Aug 11</u>	<u>Budget</u>	<u>\$ Over Budget</u>
422... · Utilities			
4422010 · Water	4,327.59	10,000.00	-5,672.41
4422020 · Electricity	211,090.74	225,011.00	-13,920.26
4422030 · Heat	0.00	1,000.00	-1,000.00
4422090 · Garbage and Refuse	0.00	6,400.00	-6,400.00
Total 422... · Utilities	<u>215,418.33</u>	<u>242,411.00</u>	<u>-26,992.67</u>
425... · Maintenance and Repairs			
4425010 · Vehicular Equipment	4,085.00	6,000.00	-1,915.00
4425099 · Other Contracted Maint/Repairs	0.00	1,000.00	-1,000.00
Total 425... · Maintenance and Repairs	<u>4,085.00</u>	<u>7,000.00</u>	<u>-2,915.00</u>
429... · Contracted Services			
4429003 · General Admin. Charges	342,858.21	457,844.00	-114,985.79
Total 429... · Contracted Services	<u>342,858.21</u>	<u>457,844.00</u>	<u>-114,985.79</u>
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	2,590.78	4,250.00	-1,659.22
4430055 · Mechanical Equipment P & S	3,000.00	8,000.00	-5,000.00
Total 430... · Supplies and Expenses	<u>9,290.78</u>	<u>16,600.00</u>	<u>-7,309.22</u>
Total 2940 · Field Maintenance	<u>724,519.56</u>	<u>988,897.48</u>	<u>-264,377.92</u>
Total Expense	<u>12,042,833.85</u>	<u>17,121,548.44</u>	<u>-5,078,714.59</u>
Net Income	<u><u>-1,757,977.69</u></u>	<u><u>-2,497,202.44</u></u>	<u><u>739,224.75</u></u>