

City of Harrisburg
Department of Public Works



Advanced Wastewater Treatment Facility

BUREAU OF SEWERAGE
MONTHLY REPORT
AUGUST 2011

PHOTO: Cold Plant Thaw, UNOX Turnaround.

GENERAL

During the month of August, the AWTF met all monthly average NPDES permit requirements. The hydraulic loading to the facility averaged 29.4 MGD while achieving removal reductions of 94.2 percent CBOD, 91.3 percent Suspended Solids, and 62.8 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 July 27, 2011 through August 27, 2011 the Number 1 or Number 2 Enginator operated a total of 70 percent of the time for an average daily kWh output of 4,094 or a total production of 126,900 kWh. August revenue is anticipated to be approximately \$10,152.00 (Exhibit D).

Included in this report is flow information collected by ADS equipment and other monitoring devices. Data collected through August 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 August, a total of 551,125 gallons of waste were delivered by the contract waste haulers to the AWTF (Exhibit G). Income, for the same period, amounted to \$19,743.32 (Exhibit G).

AUGUST ACCOMPLISHMENTS

Operations:

- Completed repairs to the SCADA cabinet in the Operator's Room which was heavily damaged by an electrical fire in July. The SCADA computer system, which is responsible for the automatic control and data recording of various treatment units, is now fully operational.
- Completed the annual UNOX Turnaround preventative maintenance project and instrument calibration for the oxygen distillation facility.
- Drafted new operating procedures for the upgraded Grit Removal System.
- Opened the inlet valve and returned the rebuilt Sewage Pump Number 1 to service at the Front Street Pump Station.
- Unclogged several blockages in the Gorman Rupp Pumps, Classifiers and collection lines at the Grit Removal System
- Continued night and weekend monitoring of the Sidestream Treatment and UNOX Pilot Trailers.

Laboratory

- Completed the second series of semi-annual industrial user compliance sampling at the Ames True Temper Incorporated and the Swatara Township Landfill.
- Completed additional compliance sampling at surchargeable industrial users, Harrisburg Dairies, Inc. and Hershey Creamery Company.
- Successfully completed the ERA 197 quality control and quality assurance proficiency testing as required for PA DEP Laboratory Accreditation.
- 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 July 2011.
- Completed the second quarter 2011 significant noncompliance evaluations.
- Issued two violation notices to Harrisburg Dairies, Inc; a letter of violation (LOV) for pH and oil/grease noncompliance and Notice of Violation for significant noncompliance reporting violations where a slug discharge of conventional pollutants was not reported or mitigated in accordance with provisions of their Industrial User Permit.
- Updated Industrial User and Contract Waste Hauler data files.
- 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:

- Repaired a hydraulic leak on Belt Filter Press Number 1.
- Replaced the wetting head on the mixing chamber for the new Polymer System.
- Replaced the expansion joints on the glycol pump for Enginator Number 1 in the Cogeneration Building.

- Replaced the shaft and bearings in the cooling fan on the large radiator on the roof of the Cogeneration Building.
- Rebuilt the SCADA System control cabinet in the Operators Room.
- Replaced the belts on Vent Fan Number 3 on the west wall of the Control Building.
- Replaced the automatic door closure on the rear door to the loading dock at the Control Building.
- Repaired Bar Screen Number 2 at the Front Street Pump Station.
- Replaced the automatic door closure on the door to the barscreen at the Front Street Pump Station.
- Removed debris repeatedly from the four Gorman Rupp Pumps for the Grit Removal System.
- Replaced the belts on Pump Number 3 for the Grit Removal System.
- Replaced all wiring for the four automatic sludge valves from the Primary Tanks to the Control Building basement control cabinet.
- Replaced the belts on the roof vent 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 repairs to Bar Screen Number 1 at the Front Street Pump Station and the annual UNOX Turnaround preventive maintenance and instrument calibrations.
- Flushed the siphon lines for CSO Number 034 and 048.
- Removed rags and debris from CSO Chambers Numbers 010, 022, 026, 031, 033, 041, 049, 054, and 061.
- Replaced the overflow detection devices at CSO Chambers Number 005, 008, 010, 011, 012, 051, and 062.
- Vactored, washed down, inspected, and greased CSO Chambers Number 034 and 048.

SEPTEMBER GOALS

- Complete 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.
- Issue Contract Waste Hauler permits and renewal letters.
- Continue the second series of semi-annual industrial user compliance sampling.
- Rebuild the rotating assembly on Sludge Pump Number 1 for the Belt Filter Presses.
- Isolate both City Island Pump Stations due to flood conditions.

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					28.9	37.7
Carbonaceous Biochemical Oxygen Demand														
Influent, mg/l	192	136	89	71	82	118	138	101					116	-----
Effluent, mg/l	17	22	16	10	6	5	5	5					11	25
Percent Removal, %	90.8	80.2	76.1	79.3	89.5	95.5	96.1	94.2					87.7	-----
Effluent Loading, lb/d	2,288	4,333	4,804	3,323	2,015	1,053	861	1,202					2,485	7,860
Suspended Solids:														
Influent, mg/l	207	164	111	91	109	162	172	130					143	-----
Effluent, mg/l	41	54	40	21	13	9	11	10					25	30
Percent Removal, %	79.4	63.2	55.8	70.5	84.7	94.2	93.4	91.3					79.1	-----
Effluent Loading, lb/d	5,547	10,480	11,996	7,158	4,251	1,802	1,879	2,462					5,697	9,433
Nitrogen														
Total-N														
Influent, mg/l	27	24	15	12	13	19	36	21					21	-----
Effluent, mg/l	30	23	16	12	12	15	19	14					18	Monitor
Effluent Loading, lb/d	4,197	4,169	4,452	4,168	3,824	2,954	3,151	3,437					3,794	-----
NH3-N														
Influent mg/l	16	12	8	7	9	13	13	11					11	-----
Effluent, mg/l	21	16	10	8	10	13	15	10					13	17 (2)
Effluent Loading, lb/d	2,931	3,013	2,732	2,512	2,799	2,724	2,505	2,144					2,670	4,716
Phosphorus:														
Influent, mg/l	4.4	3.1	2.1	1.9	2.2	3.0	3.4	2.5					2.8	-----
Effluent, mg/l	1.6	1.5	1.3	0.9	1.0	1.3	1.3	0.8					1.2	2.0
Percent Removal, %	63.7	49.9	29.1	44.1	49.0	55.6	60.7	62.8					51.9	-----
Effluent Loading, lb/d	213	285	371	281	299	261	216	193					265	629
pH:														
Influent, Std. Units	7.3	7.3	7.2	7.2	7.2	7.3	7.2	7.3					7.3	-----
Effluent, Std. Units	7.0	7.0	7.0	6.9	6.9	6.9	6.9	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					7.3	5.0 Min.
Fecal Coliform:														
Effluent, No./100 ml	13	24	87	49	9	7	5	21					27	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					0.30	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	Suburbs	City Regions					Suburb Regions					Total Precip inches
				1	2	3	4	5	6	7	8	9	10	
January	16,500	6,690	9,810	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	14,005	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	24,870	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	24,140	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	21,191	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	13,159	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	9,331	11,169	7,854	0,265	0,194	0,670	0,348	1,888	3,358	1,953	3,805	0,165	6,050
August	29,400	12,263	17,137	4,267	0,206	1,120	6,322	0,348	2,079	4,185	3,409	7,248	0,216	9,780
September														
October														
November														
December														
Average	28.95	12.01	16.94											5.88
Percent	100.00	41.50	58.50											47.06

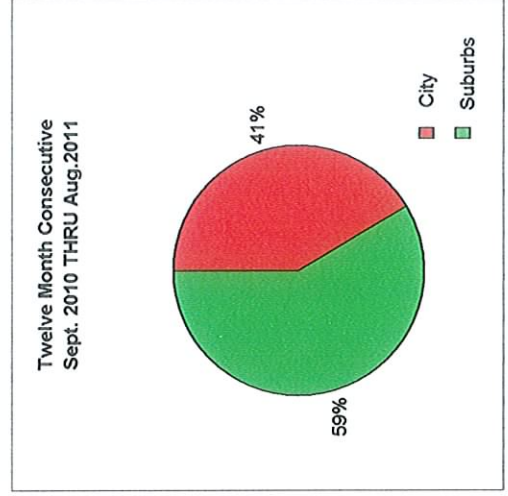
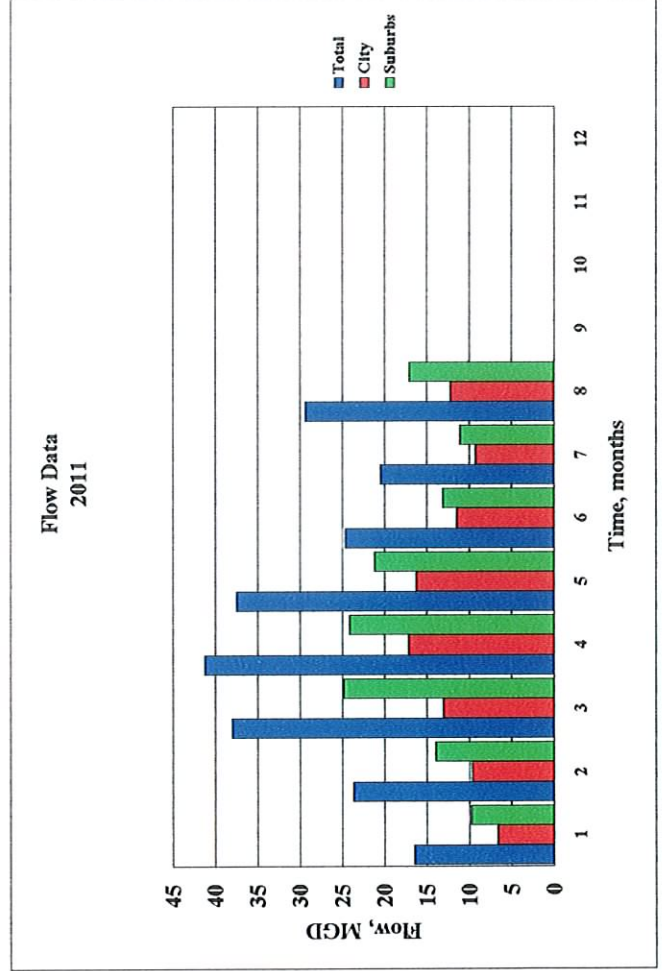


EXHIBIT C

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					999,813	7,998,500
Average, kWh/Day	32,926	32,282	31,023	32,800	34,090	33,813	35,110	30,155					32,775	-----
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					\$87,152.46	\$697,219.66
Fuel Oil														
Total, Gals.	0	0	0	0	0	0	0	0					0	0
Average, Gals./Day	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
Natural Gas														
Total, Cu Ft	\$24.5	\$32.0	362.7	144.8	13.9	22.3	11.7	*					2.99	1,912
Average, Cu Ft/Day	29.5	19.0	11.7	4.7	0.4	0.7	0.4	*					9	-----
Cost, Dollars	\$13,476.15	\$6,472.96	\$3,513.90	\$1,489.62	\$236.45	\$312.05	\$211.46	*					\$3,214.07	\$25,712.39
Water														
Total, Gal	661,000	696,000	665,000	923,000	575,000	638,000	638,000	*					685,143	4,796,000
Average, Gal./Day	21,323	24,857	21,452	30,767	19,167	20,581	20,581	*					22,675	-----
Cost, Dollars	\$5,939.33	\$6,140.58	\$5,962.33	\$7,445.83	\$5,444.83	\$5,807.08	\$5,807.08	*					\$5,318.38	\$42,547.06
Chlorine Disinfection														
Total, Lbs.	7,525	7,785	10,714	10,080	10,860	9,300	8,820	12,802					9,736	77,886
Average, Lbs./Day	243	278	346	336	350	310	285	413					320	-----
Avg Residual, mg/l	0.18	0.18	0.25	0.27	0.38	0.39	0.38	0.38					0.30	-----
Cost, \$/Lbs.	\$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					\$3,164.12	\$25,312.95
Phosphorous Removal														
Total FeSO4, Gals.	44,032	28,918	10,750	9,181	0	0	15,115	18,563					15,820	126,558
Avg FeSO4, Gals./Day	1,420	1,033	347	306	0	0	488	599					\$24	-----
FeSO4 Cost, \$/Gal.	\$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					\$8,574.27	\$68,594.17

* 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				
Sep 27th - Oct 27th, 2011				
Oct 27th - Nov 29th, 2011				
Nov 29th - Dec 29th, 2011				
Total - 2011	613	42,231	1,277,200	\$116,243.96
Monthly Average - 2011	77	5,279	159,650	\$14,530.49

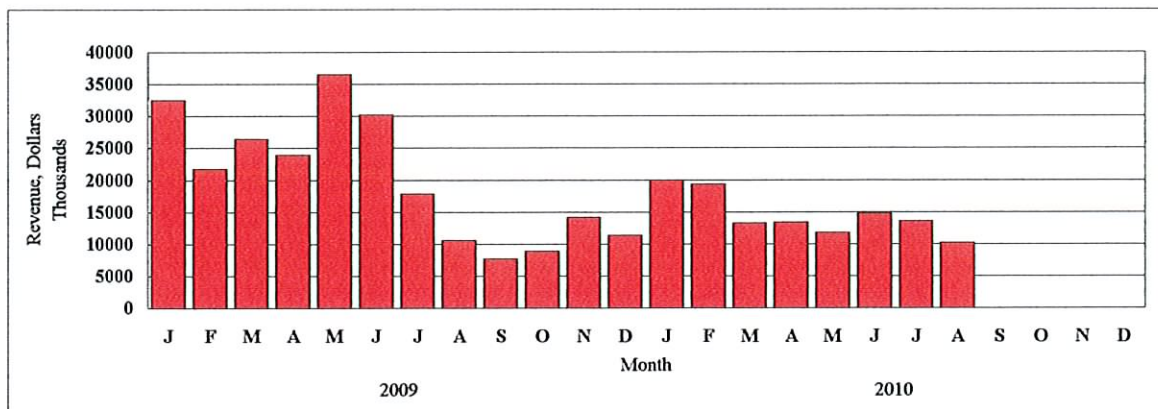


EXHIBIT E

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					892,479	7,139,832
CWH Program, Lbs.	241,180	223,240	188,119	97,257	127,320	173,423	138,434	74,920					157,987	1,263,893
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					1,091,955	8,735,637
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					3,697,875	29,583,000
Feed Solids, %	1.9	2.0	2.5	2.2	2.6	2.0	1.8	2.3					2.2	-
Labor, Hours	371	339	435	416	426	344	523	383					405	3,236
Operations, Hours	543	551	793	737	846	627	1,031	748					734	5,876
Total Cake, Dry Tons	137	155	269	186	278	192	322	232					221	1,771
Total Cake, Wet Tons	821	882	1,435	962	1,236	951	1,677	1,159					1,140	9,124
Cake TS, %	17.0	17.6	19.0	19.3	22.5	20.2	19.2	20.0					19.4	-
Press Rate, Lbs./Hour	3,024	3,204	3,618	2,613	2,923	3,032	3,253	3,100					3,096	24,767
Polymer Dosage, Lbs	3,511	3,213	4,966	3,766	4,539	4,163	6,927	4,142					4,403	35,227
Polymer Dosage, Lbs/Dry Ton	25.6	20.7	18.4	20.3	16.3	21.6	21.5	17.9					20.3	-
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					\$7,775.21	\$62,201.69
Electrical, Dollars	\$238.92	\$242.26	\$348.96	\$324.15	\$372.24	\$276.01	\$453.60	\$329.12					\$323.16	\$2,585.26
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					\$8,329.52	\$66,636.20
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					\$40,314.08	\$322,512.68
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					\$56,741.98	\$453,935.82
Cost Per Dry Ton, Dollars	\$344.64	\$352.83	\$361.18	\$322.98	\$132.98	\$203.18	\$188.45	\$250.74					\$256.38	

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						4,171	
Cost, Dollars	\$7,059.87	\$10,034.43	\$16,812.63	\$13,977.46	\$15,045.12	\$9,349.00	\$7,529.54						\$11,429.72	\$80,008.05
Fuel Oil														
Total, Gals.	0	0	0	0	0	0	0	0					0	0
Average, Gals./Day	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
Water														
Total, Gals.	5,000	5,000	5,000	55,000	40,000	10,000	5,000	*	*	*	*	*	17,857	125,000
Average, Gal./Day	161	179	161	1,833	1,333	323	161	*	*	*	*	*	593	
Cost, Dollars	\$474.28	\$474.28	\$474.28	\$761.78	\$675.53	\$503.03	\$474.28						\$548.21	\$3,837.46
Spring Creek Pump Station														
Electric														
Total, kWh	35,840	36,160	54,400	65,600	94,400	62,400	47,680	37,760					54,280	434,240
Average, kWh/Day	1,156	1,291	1,755	2,187	3,045	2,080	1,589	1,259					1,795	
Cost, Dollars	\$3,449.58	\$5,225.15	\$7,197.07	\$7,860.14	\$8,715.21	\$5,990.21	\$3,039.47	\$3,642.89					\$5,889.97	\$47,119.72
Fuel Oil														
Total, Gals.	0	0	0	0	0	0	0	0					0	0
Average, Gals./Day	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
Water														
Total, Gals.	53,000	22,000	1,000	0	1,000	1,000	0	*	*	*	*	*	11,143	78,000
Average, Gal./Day	1,710	786	32	0	33	32	0	*	*	*	*	*	370	
Cost, Dollars	\$553.36	\$175.11	\$54.36	\$48.61	\$54.36	\$54.36	\$48.61						\$112.68	\$788.77
Market Street Pump Station														
Electric														
Total, kWh	10,920	11,280	7,200	6,600	5,520	2,280	*	1,920					6,531	45,720
Average, kWh/Day	353	403	232	220	178	76	*	64					218	
Cost, Dollars	\$1,032.95	\$1,404.94	\$756.26	\$893.73	\$754.55	\$435.90	*	\$314.55					\$798.98	\$5,592.88
Fuel Oil														
Total, Gals.	0	0	0	0	0	0	0	0					0	0
Average, Gals./Day	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
City Island Pump Station														
Electric														
Total, kWh	680	640	640	560	600	680	*	600					629	4,400
Average, kWh/Day	22	23	21	19	19	23	*	20					21	
Cost, Dollars	\$83.39	\$97.74	\$99.89	\$156.43	\$184.51	\$82.04	*	\$73.16					\$111.02	\$777.16

* 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						
October						
November						
December						
Total - 2011	10,653,350	\$342,746.10	538,725	\$18,857.72	11,192,075	\$361,603.82
Monthly Average - 2011	1,331,669	\$42,843.26	67,341	\$2,357.22	1,399,009	\$45,200.48

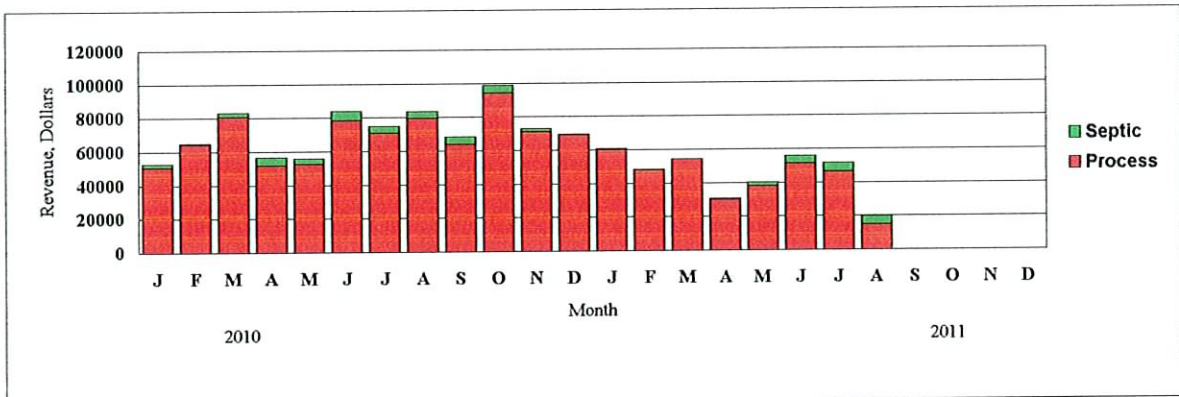


Exhibit H
CITY OF HARRISBURG
ADVANCED WASTEWATER TREATMENT FACILITY

	Jan - Jul 11	Budget	\$ Over Budget
Income			
2900 · Income			
350 · Interest Income			
350002 · Interest Savings - Con/Treat	1,901.02	1,450.00	451.02
350003 · Interest Savings - Collection	378.42	250.00	128.42
352002 · Interest Other - Con/Treat	0.13	600.00	-599.87
352003 · Interest Other-Collection	0.00	100.00	-100.00
Total 350 · Interest Income	2,279.57	2,400.00	-120.43
369 · Sewerage Utility Fund			
369002 · Conveyance/Treatment Revenue	2,666,047.04	5,143,000.00	-2,476,952.96
369003 · Collection System Revenue	466,320.51	928,000.00	-461,679.49
369005 · Sales of Scrap	105.30	400.00	-294.70
369008 · Sales to Public Authorities	4,530,137.60	7,943,746.00	-3,413,608.40
369010 · Sludge Handling Charges	362,167.98	370,000.00	-7,832.02
369011 · Sales of Electric Power	297,987.48	150,000.00	147,987.48
369012 · Contract Waste Hauling Charges	1,150.00	2,000.00	-850.00
369013 · Pretreatment Charges	4,350.00	8,100.00	-3,750.00
369014 · Contract Waste Hauling Lab Fees	12,427.00	29,000.00	-16,573.00
369015 · Pretreatment Lab Fees	12,857.00	18,000.00	-5,143.00
369053 · Liens Principal - Convey/Treat	15,623.32	20,700.00	-5,076.68
369054 · Liens Interest - Convey/Treat	3,985.78	4,000.00	-14.22
369055 · Liens Principal - Collection	3,109.66	4,100.00	-990.34
369056 · Liens Interest - Collection	793.38	900.00	-106.62
Total 369 · Sewerage Utility Fund	8,377,062.05	14,621,946.00	-6,244,883.95
Total 2900 · Income	8,379,341.62	14,624,346.00	-6,245,004.38
Total Income	8,379,341.62	14,624,346.00	-6,245,004.38
Gross Profit	8,379,341.62	14,624,346.00	-6,245,004.38
Expense			
2910 · Administration			
414 · Salaries and Wages			
1414000 · Wages - Hourly Employees	130,670.37	248,698.00	-118,027.63
1416000 · Overtime	169.19	320.00	-150.81
1417000 · Sick Leave Buyback	3,345.14	3,400.00	-54.86
Total 414 · Salaries and Wages	134,184.70	252,418.00	-118,233.30
419 · Fringe Benefits			
1419001 · Social Security	11,314.80	20,939.00	-9,624.20
1419002 · Blue Cross/Shield	67,041.04	125,029.00	-57,987.96
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	4,678.74	41,000.00	-36,321.26
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	100,758.07	218,341.49	-117,583.42
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	4,149.21	16,000.00	-11,850.79
1420050 · Postage	542.21	750.00	-207.79
Total 420 · Communications	11,191.69	24,019.00	-12,827.31
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 - Jul 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)	49,790.00	100,000.00	-50,210.00
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	259,136.92	435,196.82	-176,059.90
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.	1,753,752.00	3,018,507.00	-1,264,755.00
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	3,531.21	6,000.00	-2,468.79
Total 429 - Other Contracted Services	1,776,872.74	3,045,010.56	-1,268,137.82
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	2,161,000.00	-446,323.64
1449031 - Pennvest	233,090.16	252,389.08	-19,298.92
Total 449 - Authority Payments	1,947,766.52	2,413,389.08	-465,622.56
Total 2910 - Administration	4,358,526.14	6,562,723.79	-2,204,197.65
2920 - Operations			
414 - Salaries and Wages - Operations			
2414000 - Wages-Hourly Employees	486,351.37	867,828.00	-381,476.63
2416000 - Overtime	100,680.22	220,030.17	-119,349.95
Total 414 - Salaries and Wages - Operations	587,031.59	1,087,858.17	-500,826.58
419 - Fringe Benefits			
2419001 - Social Security	44,907.92	83,221.00	-38,313.08
2419002 - Blue Cross/Blue Shield	106,416.15	265,316.00	-158,899.85
Total 419 - Fringe Benefits	151,324.07	348,537.00	-197,212.93
422 - Utilities and Service			
2422010 - Water	30,863.90	115,000.00	-84,136.10
2422020 - Electricity	402,679.80	961,319.00	-558,639.20
2422030 - Heat	71,740.79	125,604.00	-53,863.21
2422090 - Garbage & Refuse Removal	703,012.90	831,610.00	-128,597.10
Total 422 - Utilities and Service	1,208,297.39	2,033,533.00	-825,235.61
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
2425099 - Other Contracted Maint & Repair	30,450.72	30,500.00	-49.28
Total 425 - Maintenance and Repairs	190,261.72	190,500.00	-238.28
429 - Contracted Services			
2429003 - General Admin. Charges	1,852,168.03	3,193,188.00	-1,341,019.97
Total 429 - Contracted Services	1,852,168.03	3,193,188.00	-1,341,019.97

Exhibit H
CITY OF HARRISBURG
ADVANCED WASTEWATER TREATMENT FACILITY

	Jan - Jul 11	Budget	\$ Over Budget
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	414,660.13	440,000.00	-25,339.87
2430099 · Miscellaneous	0.00	412,500.00	-412,500.00
Total 430. · Supplies and Expenses	499,868.38	943,500.00	-443,631.62
Total 2920 · Operations	4,488,951.18	7,798,292.17	-3,309,340.99
2930 · Maintenance			
414.. · Wages and Salary			
3414000 · Wages-Hourly Employees	225,874.94	417,476.00	-191,601.06
3416000 · Overtime	1,656.09	6,025.00	-4,368.91
Total 414.. · Wages and Salary	227,531.03	423,501.00	-195,969.97
419.. · Fringe Benefits			
3419001 · Social Security	17,406.12	32,400.00	-14,993.88
3419002 · Blue Cross/Blue Shield	51,813.13	136,640.00	-84,826.87
Total 419.. · Fringe Benefits	69,219.25	169,040.00	-99,820.75
425.. · Maintenance and Repairs			
3425010 · Vehicle Equipment	9,517.50	10,100.00	-582.50
3425060 · Operations Equipment	1,500.00	5,000.00	-3,500.00
Total 425.. · Maintenance and Repairs	11,017.50	15,100.00	-4,082.50
429.. · Contracted Service			
3429003 · General Admin. Charges	360,087.15	605,847.00	-245,759.85
3429090 · Miscellaneous	5,910.00	8,900.00	-2,990.00
Total 429.. · Contracted Service	365,997.15	614,747.00	-248,749.85
430.. · Supplies and Expenses			
3430012 · Personal Safety Supplies	0.00	300.00	-300.00
3430030 · Snow/Ice Control Supplies	0.00	200.00	-200.00
3430036 · Building & Construction Supplie	0.00	1,500.00	-1,500.00
3430040 · Botanical	0.00	200.00	-200.00
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	14,403.45	16,500.00	-2,096.55
3430051 · Tires & Batteries	774.82	2,600.00	-1,825.18
3430052 · Vehicle Parts & Supplies	1,409.51	10,500.00	-9,090.49
3430055 · Mechanical Equipmt-Parts & Supp	180,011.93	185,000.00	-4,988.07
3430057 · Pipe Connection Etc	13,000.00	13,000.00	0.00
3430099 · Misc. Supplies & Expenses	11,184.34	13,000.00	-1,815.66
Total 430.. · Supplies and Expenses	233,262.05	262,800.00	-29,537.95
457.. · Sewer Plant Equipment			
3457000 · Plant Equipment	56,768.00	75,100.00	-18,332.00
Total 457.. · Sewer Plant Equipment	56,768.00	75,100.00	-18,332.00
Total 2930 · Maintenance	963,794.98	1,560,288.00	-596,493.02
2940 · Field Maintenance			
414... · Wages and Salary - Fd. Main.			
4414000 · Wages Hourly Employees	94,977.88	174,570.00	-79,592.12
4416000 · Overtime	9,378.27	18,821.48	-9,443.21
Total 414... · Wages and Salary - Fd. Main.	104,356.15	193,391.48	-89,035.33
419... · Fringe Benefits			
4419001 · Social Security	7,983.19	14,795.00	-6,811.81
4419002 · Blue Cross/Blue Shield	23,971.68	55,856.00	-31,884.32
Total 419... · Fringe Benefits	31,954.87	70,651.00	-38,696.13
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
422.. · Utilities			
4422010 · Water	3,597.70	10,000.00	-6,402.30
4422020 · Electricity	174,101.49	225,011.00	-50,909.51
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	177,699.19	242,411.00	-64,711.81

Exhibit H
CITY OF HARRISBURG
ADVANCED WASTEWATER TREATMENT FACILITY

	Jan - Jul 11	Budget	\$ Over Budget
425... · Maintenance and Repairs			
4425010 · Vehicular Equipment	3,710.00	6,000.00	-2,290.00
4425099 · Other Contracted Maint/Repairs	0.00	1,000.00	-1,000.00
Total 425... · Maintenance and Repairs	3,710.00	7,000.00	-3,290.00
429... · Contracted Services			
4429003 · General Admin. Charges	266,858.21	457,844.00	-190,985.79
Total 429... · Contracted Services	266,858.21	457,844.00	-190,985.79
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	3,467.89	3,500.00	-32.11
4430051 · Tires & Batteries	196.35	200.00	-3.65
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	9,255.02	16,600.00	-7,344.98
Total 2940 · Field Maintenance	593,833.44	988,897.48	-395,064.04
Total Expense	10,405,105.74	16,910,201.44	-6,505,095.70
Net Income	<u>-2,025,764.12</u>	<u>-2,285,855.44</u>	<u>260,091.32</u>