

ELECTRONIC ANNUAL OPERATING REPORT

Emission Report by Facility

Facility ID: 0112357

of Emission Units: 4

Owner/Company Name: BROWARD COUNTY WATER/WASTEWATER SERVICES

Site Name: BROWARD COUNTY/NORTH REGIONAL WWTF

<u>Pollutant</u>	<u>2012</u> <u>Actual (TPY)</u>	<u>2011</u> <u>Actual (TPY)</u>
CO	15.487580	18.455580
H169	0.332000	3.433000
HAPS	0.754000	3.980000
NH3	243.195000	226.166400
NOX	14.308420	8.820420
PB		
PM	0.391000	0.571000
PM10	0.391000	0.571000
SO2	0.284010	0.233010
VOC	4.583050	8.621050

11_Month_Gas.txt									
_timestamp	,Flare1 CFH	, Flare2 CFH	,Boiler1 CFM	,Boiler2 CFM	,Boiler3 CFM	,Boiler4 CFM	,Boiler5 CFM	,Boiler6 CFM	,Boiler7 CFM
2012-12-01 00:00:00.000,	5830046.0,	1160026.3,	1.2840408E+9,	7.3999027E+8,	0.0,	1.2052302E+9,	9.451017E+8,	1.5536445E+9,	1.5192325E+9
2013-01-01 00:00:00.000,	5277013.0,	1300254.4,	1.2866253E+9,	7.0413862E+8,	0.0,	1.348405E+9,	8.8291648E+8,	1.4985807E+9,	1.7260209E+9
2013-02-01 00:00:00.000,	1.0075793E+7,	0.0,	1.1554918E+9,	6.054295E+8,	0.0,	1.2510797E+9,	8.1379181E+8,	1.5638885E+9,	1.5602248E+9
2013-03-01 00:00:00.000,	1.1285422E+7,	0.0,	1.2771958E+9,	6.4776621E+8,	0.0,	1.4089916E+9,	8.8011846E+8,	1.5915962E+9,	1.7218307E+9
2013-04-01 00:00:00.000,	1.3453059E+7,	0.0,	1.2262007E+9,	7.0592538E+8,	0.0,	1.3297956E+9,	8.6654394E+8,	1.7693325E+9,	6.4862829E+8
2013-05-01 00:00:00.000,	1.5129682E+7,	0.0,	1.1084508E+9,	7.3920608E+8,	0.0,	1.3943662E+9,	9.0423802E+8,	1.8301554E+9,	0.0
2013-06-01 00:00:00.000,	1.3724685E+7,	0.0,	1.0498394E+9,	9.4503949E+8,	0.0,	1.321143E+9,	8.4109875E+8,	1.6336753E+9,	34056.922
2013-07-01 00:00:00.000,	1.1394068E+7,	2968781.5,	1.1101814E+9,	1.13354E+9,	0.0,	1.4384063E+9,	8.5528E+8,	1.6700045E+9,	12950.987
2013-08-01 00:00:00.000,	1.1713224E+7,	2523590.0,	1.5054931E+9,	1.1079156E+9,	0.0,	1.4002715E+9,	8.1874643E+8,	1.5973917E+9,	9289.4502
2013-09-01 00:00:00.000,	1.0185624E+7,	1282.74,	2.2973757E+9,	1.0285752E+9,	0.0,	1.3027725E+9,	7.7312282E+8,	1.4906848E+9,	2517.1428
2013-10-01 00:00:00.000,	9134546.0,	74149.453,	2.518855E+8,	2.681292E+8,	0.0,	2.8530806E+8,	1.8962221E+8,	3.6652598E+8,	44407.828
2013-11-01 00:00:00.000,	7184193.0,	685245.25,	1.7880382E+7,	1.7203312E+7,	0.0,	2.8077752E+7,	1.9129124E+7,	1.9091632E+7,	6096.3618

<u>_timestamp</u>	<u>Flare1 CFH</u>	<u>Flare2 CFH</u>	<u>Boiler1 CFM</u>	<u>Boiler2 CFM</u>	<u>Boiler3 CFM</u>	<u>Boiler4 CFM</u>	<u>Boiler5 CFM</u>	<u>Boiler6 CFM</u>	<u>Boiler7 CFM</u>
Dec-12	5830046	1160026.3	1.28E+09	7.40E+08	0	1.21E+09	9.45E+08	1.55E+09	1.52E+09
Jan-13	5277013	1300254.4	1.29E+09	7.04E+08	0	1.35E+09	8.83E+08	1.50E+09	1.73E+09
Feb-13	1.01E+07	0	1.16E+09	6.05E+08	0	1.25E+09	8.14E+08	1.56E+09	1.56E+09
Mar-13	1.13E+07	0	1.28E+09	6.48E+08	0	1.41E+09	8.80E+08	1.59E+09	1.72E+09
Apr-13	1.35E+07	0	1.23E+09	7.06E+08	0	1.33E+09	8.67E+08	1.77E+09	6.49E+08
May-13	1.51E+07	0	1.11E+09	7.39E+08	0	1.39E+09	9.04E+08	1.83E+09	0
Jun-13	1.37E+07	0	1.05E+09	9.45E+08	0	1.32E+09	8.41E+08	1.63E+09	34056.922
Jul-13	1.14E+07	2968781.5	1.11E+09	1.13E+09	0	1.44E+09	8.55E+08	1.67E+09	12950.987
Aug-13	1.17E+07	2523590	1.51E+09	1.11E+09	0	1.40E+09	8.19E+08	1.60E+09	9289.4502
Sep-13	1.02E+07	1282.74	2.30E+09	1.03E+09	0	1.30E+09	7.73E+08	1.49E+09	2517.1428
Oct-13	9134546	74149.453	2.52E+08	2.68E+08	0	2.85E+08	1.90E+08	3.67E+08	44407.828
Nov-13	7184193	685245.25	1.79E+07	1.72E+07	0	2.81E+07	1.91E+07	1.91E+07	6096.3618

12-Month Consecutive Rolling Total: **November 2013 Record**

_timestamp	Flare1 CFH	Flare2 CFH	Boiler1 CFM	Boiler2 CFM	Boiler3 CFM	Boiler4 CFM	Boiler5 CFM	Boiler6 CFM	Boiler7 CFM	Boilers Total CFM	Boilers cf/mo
Dec-12	5830046	1160026.3	1.28E+09	7.40E+08	0	1.21E+09	9.45E+08	1.55E+09	1.52E+09	120,787,333	2,706
Jan-13	5277013	1300254.4	1.29E+09	7.04E+08	0	1.35E+09	8.83E+08	1.50E+09	1.73E+09	124,111,450	2,780
Feb-13	1.01E+07	0	1.16E+09	6.05E+08	0	1.25E+09	8.14E+08	1.56E+09	1.56E+09	115,831,769	2,595
Mar-13	1.13E+07	0	1.28E+09	6.48E+08	0	1.41E+09	8.80E+08	1.59E+09	1.72E+09	125,458,316	2,810
Apr-13	1.35E+07	0	1.23E+09	7.06E+08	0	1.33E+09	8.67E+08	1.77E+09	6.49E+08	109,107,107	2,444
May-13	1.51E+07	0	1.11E+09	7.39E+08	0	1.39E+09	9.04E+08	1.83E+09	0	99,606,942	2,231
Jun-13	1.37E+07	0	1.05E+09	9.45E+08	0	1.32E+09	8.41E+08	1.63E+09	34056.922	96,513,833	2,162
Jul-13	1.14E+07	2968781.5	1.11E+09	1.13E+09	0	1.44E+09	8.55E+08	1.67E+09	12950.987	103,457,086	2,318
Aug-13	1.17E+07	2523590	1.51E+09	1.11E+09	0	1.40E+09	8.19E+08	1.60E+09	9289.4502	107,163,794	2,401
Sep-13	1.02E+07	1282.74	2.30E+09	1.03E+09	0	1.30E+09	7.73E+08	1.49E+09	2517.1428	114,875,559	2,573
Oct-13	9134546	74149.453	2.52E+08	2.68E+08	0	2.85E+08	1.90E+08	3.67E+08	44407.828	22,691,923	508
Nov-13	7184193	685245.25	1.79E+07	1.72E+07	0	2.81E+07	1.91E+07	1.91E+07	6096.3618	1,689,805	38
	124,387,355	8,713,330									

TOTAL	133,100,685
FLARES (12 consecutive months)	

TOTAL FLARES CALCULATION:

The total for the month of record plus the totals for the eleven months previous to the month of record for both flares (Flare 1 + Flare 2)

*CFH = cubic feet per hour

TOTAL BOILERS CALCULATION:

Total CFM = 60 (min) x 24 (hr) x 31 (days)

*CFM = cubic feet per minute

Total cubic feet per month = Total CFM/44640 (min)

*44640 = minutes in a month

31 days: January, March, May, July, August, October, December

30 days: April, June, September, November

28 days: February

12-Month Consecutive Rolling Total: **October 2013 Record**

timestamp	Flare1 CFH	Flare2 CFH	Boiler1 CFM	Boiler2 CFM	Boiler3 CFM	Boiler4 CFM	Boiler5 CFM	Boiler6 CFM	Boiler7 CFM	Boilers Total CFM	Boilers cf/mo
Nov-12	3,938,616	1,065,754	1,239,630,700	704,030,530	0	1,309,250,900	908,711,620	1,516,997,100	1,236,196,900	115,246,963	2,582
Dec-12	5,830,046	1,160,026	1,284,040,800	739,990,270	0	1,205,230,200	945,101,700	1,553,644,500	1,519,232,500	120,787,333	2,706
Jan-13	5,277,013	1,300,254	1,286,625,300	704,138,620	0	1,348,405,000	882,916,480	1,498,580,700	1,726,020,900	124,111,450	2,780
Feb-13	10,075,793	0	1,155,491,800	605,429,500	0	1,251,079,700	813,791,810	1,563,888,500	1,560,224,800	115,831,769	2,595
Mar-13	11,285,422	0	1,277,195,800	647,766,210	0	1,408,991,600	880,118,460	1,591,596,200	1,721,830,700	125,458,316	2,810
Apr-13	13,453,059	0	1,226,200,700	705,925,380	0	1,329,795,600	866,543,940	1,769,332,500	648,628,290	109,107,107	2,444
May-13	15,129,682	0	1,108,450,800	739,206,080	0	1,394,366,200	904,238,020	1,830,155,400	0	99,606,942	2,231
Jun-13	13,724,685	0	1,049,839,400	945,039,490	0	1,321,143,000	841,098,750	1,633,675,300	34,057	96,513,833	2,162
Jul-13	11,394,068	2,968,782	1,110,181,400	1,133,540,000	0	1,438,406,300	855,280,000	1,670,004,500	12,951	103,457,086	2,318
Aug-13	11,713,224	2,523,590	1,505,493,100	1,107,915,600	0	1,400,271,500	818,746,430	1,597,391,700	9,289	107,163,794	2,401
Sep-13	10,185,624	1,283	2,297,375,700	1,028,575,200	0	1,302,772,500	773,122,820	1,490,684,800	2,517	114,875,559	2,573
Oct-13	9,134,546	74,149	251,885,500	268,129,200	0	285,308,060	189,622,210	366,525,980	44,408	22,691,923	508
	121,141,778	9,093,838	1,232,700,917	777,473,840	0	1,249,585,047	806,607,687	1,506,873,098	701,019,776		
TOTAL	130,235,616										
FLARES (12 consecutive months)											

TOTAL FLARES CALCULATION:

The total for the month of record plus the totals for the eleven months previous to the month of record for both flares (Flare 1 + Flare 2)

*CFH = cubic feet per hour

TOTAL BOILERS CALCULATION:

Total CFM = 60 (min) x 24 (hr) x 31 (days)

*CFM = cubic feet per minute

Total cubic feet per month = Total CFM/44640 (min)

*44640 = minutes in a month

Note: the average # of days per month is 30.4

31 days: January, March, May, July, August, October, December

30 days: April, June, September, November

28 days: February