

The Harrisburg Authority  
Harrisburg Resource Recovery Facility  
Monthly Operating Report  
**August 2011**

Prepared by Covanta Harrisburg, Inc.

August 1<sup>st</sup>, 2011 to August 31<sup>st</sup>, 2011

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## **1.0 Summary**

This Harrisburg Resources Recovery Operating Report covers the period August 1<sup>st</sup>, 2011 to August 31<sup>st</sup>, 2011.

### **WASTE VOLUMES:**

- Waste volume received for August was 28,613 tons or 1,122 tons per workday.
- Volume processed by the facility for August was 27,664 tons or 892 tons per day.
- Long-haul spot waste deliveries for August were 8,938 tons or 31% of the total volume received.

Efforts continue to optimize pricing for waste deliveries for the facility.

### **ENERGY SALES:**

9,126 MWs of electric were sold on to the PJM grid. Day Ahead pricing averaged \$42.84 per MW and Real Time pricing averaged \$38.64 per MW.

### **OUTAGE ACTIVITY:**

There were no scheduled outages for the month of August. Units #1 was taken offline for routine cleaning and unit #3 was taken offline for several ash roller jams. The turbine tripped offline line due low steam temperature while bring unit #3 back online.

### **COMMUNITY ACTIVITY (Preceding 6 months):**

- Participated in a fund raising event for a Dauphin County environmental education organization.
- Participated in the Youth Day of Caring event in South Allison Hill.
- Donated supplies to the Harrisburg Multicultural Event.
- Sponsored several Earth Day events at several local school districts.
- Several EITC scholarships were awarded to Harrisburg area students.
- Covanta Harrisburg continues to support the fund raising activities of Centenary UM Church, Steelton, PA.

## 2.0 Production and Performance Summary:

### HARRISBURG RESOURCE RECOVERY FACILITY

#### Production and Performance Summary

From: [01-August-2011](#) To [31-August-2011](#)

<b>DESIGN DATA</b>	No. Operating Units		3
Refuse (TPD)	800	HHV (Btu/lb)	5,200
Steam (lb/hr)	205,710	Turbine (MW)	20.843
Steam Press (psig)	600	Stm Temp (deg F)	750
Gross KWH/Ton	560	Net KWH/Ton	470

<b>PRODUCTION</b>	<b>UNITS</b>	<b>ACTUAL PRODUCTION VALUES</b>		
Refuse Received	Tons	<b>28,613</b>	923	TPD
Non-Processible Waste	Tons	<b>899</b>	29	TPD
Refuse Processed	Tons	<b>27,664</b>	892	TPD
Supplemental Waste	Tons	<b>0</b>	0.0	% of Refuse
Ash	Tons	<b>8,331</b>	30.1	% of Refuse
Ferrous	Tons	<b>635</b>	2.3	% of Refuse
Steam	klbs	<b>155,040</b>	101.3	% of MCR
Steam Exported	klbs	<b>0</b>	0.0	Lbs Steam/Ton
Gross Electric	MWH	<b>11,836</b>	427.8	KWH/Ton
Net Electric	MWH	<b>9,126</b>	329.9	KWH/Ton

<b>UTILITIES</b>	<b>UNITS</b>	<b>ACTUAL</b>	<b>UTILITY PER TON OF REFUSE</b>	
In-plant Power	MWH	<b>2,715</b>	98.1	KWH/Ton
Purchased Power	MWH	<b>5</b>	0.2	KWH/Ton
Aux Fuel Oil	kgals	<b>0.00</b>	0.0	Gal/Ton
Aux Natural Gas	kCuFt	<b>3,721</b>	134.5	CuFt/Ton
Waste Water	kgals	<b>0</b>	0.0	Gal/Ton
Make-up	kgals	<b>724</b>	26.2	Gal/Ton
Make-up	% of Steam	<b>3.89</b>		
Potable Water	kgals	<b>16,255</b>	587.6	Gal/Ton
Hydrated Lime	Tons	<b>603</b>	43.6	Lbs/Ton
Urea	Gals	<b>7,304</b>	0.26	Gal/Ton
Carbon	Tons	<b>17</b>	1.2	Lbs/Ton
<b>PERFORMANCE</b>	<b>UNITS</b>	<b>CALCULATED</b>	<b>TUBE LEAK INCIDENTS</b>	
Refuse HHV	Btu/lb	<b>4,403</b>	<b>Monthly</b>	<b>YTD</b>
Refuse Processed	Ref Tons	<b>23,424</b>	0	0
Refuse Processed	Ref TPD	<b>756</b>		
Gross Energy Rec.	KWH/Ref Ton	<b>505.3</b>		
In-plant Elec.	KWH/Ref Ton	<b>115.9</b>		

<b>AVAILABILITY</b>	<b>UNITS</b>	<b>MONTHLY AVAIL.</b>	<b>YTD AVAIL.</b>	<b>MONTHLY TIME ON-LINE</b>	<b>YTD TIME ON-LINE</b>
Boiler 1	%	<b>97.1%</b>	<b>92.1%</b>	<b>97.1%</b>	<b>89.2%</b>
Boiler 2	%	<b>100.0%</b>	<b>92.9%</b>	<b>100.0%</b>	<b>91.5%</b>
Boiler 3	%	<b>81.0%</b>	<b>90.0%</b>	<b>81.0%</b>	<b>89.9%</b>
Avg. Boiler Avail.	%	<b>92.7%</b>	<b>91.7%</b>	<b>92.7%</b>	<b>90.2%</b>
Turbine	%	<b>99.7%</b>	<b>97.5%</b>	<b>99.7%</b>	<b>97.5%</b>

### 3.0 O&M Activities:

#### SCHEDULED OUTAGES:

There were no scheduled outages for the month.

#### NON-SCHEDULED OUTAGES:

- Boiler #1 was taken offline 21.5 hours for routine cleaning
- Boiler #3 was taken offline 141.4 hours for ash roller jams.
- The Turbine/Generator was offline 2.2 hours due to low steam temperature during the start up of Unit #3.

### 4.0 Safety and Environmental:

0 OSHA recordable accidents.

The facility experienced one (1) reportable for CO and no reportable exempt air emission permit Limit exceedances during the month of August 2011.

### 5.0 MBE/WBE Participation

As August 31, 2011 there were Forty Six (46) workers employed by Covanta at the facility.

City Residents 17 % Total City Employees			Minority Employees 24% Total Employees			Women 8% Total Employees		
Afro-American	5	62 %	Afro-American	6	50 %	Afro-American	1	25 %
Caucasian	2	25 %	Female	4	40 %	Caucasian	3	75 %
Hispanic	1	12 %	Hispanic	1	10 %			
TOTAL # City Residents	8	100%	TOTAL # Minority Employ.	11	100%	TOTAL # Women	4	100%