

Alexandria Arlington Resource Recovery Facility

Fiscal Year 2016 Annual Operations Report

August 2016



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Definition of Abbreviations & Acronyms

<u>Abbreviation/Acronym</u>	<u>Definition</u>
APC	Air Pollution Control
Apr	April
Aug	August
Avg	Average
Btu	British thermal unit
CAAI	Covanta Alexandria Arlington, Inc.
CEMS	Continuous Emissions Monitoring System
CO	Carbon Monoxide
Dec	December
ECOM	Emergency Communications
Feb	February
FMG	Facility Monitoring Group
FY	Fiscal Year
gal	Gallon
GAT	Guaranteed Annual Tonnage
HCl	Hydrochloric (Hydrogen Chlorides)
HDR	HDR Engineering Inc
ID	Induced Draft
Jan	January
Jul	July
Jun	June
klbs	Kilo-pounds (1,000 lbs)
kW hr	Kilowatt hours (1,000 watt-hours)
lbs	Pounds
LOA	Letter of Agreement
Mar	March
Max	Maximum
May	May
Min	Minimum
MSW	Municipal Solid Waste
MW hr	Megawatt hours
No	Number
NOV	Notice of Violation
Nov	November
NO _x	Nitrogen Oxide
Oct	October
OSHA	Occupational Safety and Health Administration
PDS	Potomac Disposal Services
ppm	Parts per million
ppmdv	Parts per million dry volume
PSD	Prevention of Significant Deterioration
Q1	First Quarter
Q2	Second Quarter
Q3	Third Quarter
Q4	Fourth Quarter
RE	Reportable Exempt
RNE	Reportable Non-Exempt
SDA	Spray Dryer Absorber
Sep	September
SO ₂	Sulfur Dioxide
TCLP	Toxicity Characteristic Leaching Procedure
VADEQ	Virginia Department of Environmental Quality
WL	Warning Letter
yr	Year
YTD	Year to date

Alexandria/Arlington Waste-to-Energy Facility Annual Operating Report – Fiscal Year 2016

1.0 Purpose of Report

HDR Engineering, Inc. (HDR) was authorized by the Facility Monitoring Group (FMG) to conduct quarterly inspections and provide quarterly reports regarding the operation and maintenance of the Covanta Alexandria/Arlington Waste-to-Energy Facility (Facility) for the 2016 calendar year. This report is prepared for the fourth quarter of the 2016 fiscal year and summarizes Facility operations between April 1, 2016 and June 30, 2016, as well as the entire fiscal year. This report identifies the fiscal year beginning on July 1, 2015 as FY16 and the quarter beginning on April 1, 2016 as Q4FY16.

This report is based upon HDR's experience in the waste-to-energy industry, upon site observation visits and previous reports provided by HDR, and upon data provided by Covanta Alexandria / Arlington, Inc. (CAAI), the Facility owner and operator.

2.0 Executive Summary

CAAI operated the Facility in an acceptable manner and in accordance with established waste-to-energy industry practices during Q4FY16. The operation of the Facility, maintenance, safety, and overall cleanliness continue to be above average. Environmental performance was excellent with no reportable environmental excursions throughout the quarter.

During Q4FY16, the Facility experienced two (2) instances of unscheduled downtime for the boilers totaling 30.7 hours, and one (1) instance of unscheduled downtime for Turbine Generator No. 2 totaling 6.7 hours. Beginning June 27, 2016, Boiler No. 2 experienced 25.3 hours of downtime for scheduled maintenance. No standby time was experienced by the Facility during Q4FY16. A detailed listing of downtime is provided in Section 5.2 of this report.

Average waste processed during the quarter was 1,029 tons per day, or 105.5% of nominal facility capacity. Waste deliveries averaged 1,037 tons per day, which is 0.8% higher than the burn rate. The capacity utilization of 105.5% compares favorably to industry averages, which are generally in the 88% to 92% range.

For FY16, average waste processed was 956.0 tons per day, or 98.1% of nominal facility capacity of 975 tons per day. Waste deliveries averaged 961.9 tons per day, which is 0.6% more than the annual burn rate. The annual capacity utilization of 98.1% compares very favorably to industry averages.

Performance trends for various measurements are presented in Section 4. In general, the Facility continues to demonstrate reasonable consistency in month to month performance throughout the most recent three-year period tracked for detailed comparisons.

During the quarter, MSW processed slightly decreased (less than 0.1%) from the corresponding quarter in FY15; steam production slightly increased (less than 0.1%), and electricity generated (gross) significantly increased (10.1%) from the corresponding quarter in FY15. The slight increase in steam generation was attributable to the increase (3.6%) in the calculated average waste heating value, offset by more downtime (20 additional hours) experienced by the boilers. The significant increase in gross electrical generation in Q4FY16 as compared to Q4FY15 is attributable to the slight increase in steam production and significantly less downtime (450 fewer hours) experienced by the turbine generators.

During FY16, MSW processed increased 0.3% from FY15; steam production increased 0.4%, and electricity generated (gross) increased 2.2% compared to FY15. The increase in steam generation was attributable to the increase (1.1%) in the calculated average waste heating value, as well as less (111 fewer hours) scheduled, unscheduled, and standby downtime experienced by the boilers. The increase in gross electrical generation in FY16 as compared to FY15 is attributable to the increase in steam production, as well as less (225.7 fewer hours) scheduled, unscheduled, and standby downtime experienced by the

turbine generators. Also note that 2016 is a Leap Year and February 2016 had an additional day of operations, when compared to the prior 2 operating years, which positively biases processed tonnage, steam production, and electrical generation.

3.0 Facility Inspection and Records Review

In May 2016, HDR met with the Facility management and other plant personnel to discuss Facility operations, and maintenance, acquire data and reports, perform an independent visual inspection of the operating Facility, photograph areas of interest, and perform a review of recent Facility activity. This visit was coordinated with the scheduled FMG meeting. At the time of the inspection, HDR reviewed CAAI records, discussed performance issues with CAAI staff, and provided a verbal report and performance statistics at the May 2016 FMG meeting. HDR maintains a running tabulation of the status of corrective actions and plant performance trends. CAAI provides the following documents for each month:

- Facility Monthly Operating Reports
- Monthly Continuous Emissions Monitoring System (CEMS) Reports

Table 1 summarizes maintenance, repair, and plant condition issues reported during this and prior reporting periods. An “A” indicates an issue of the highest priority and worthy of immediate attention. Such items are usually safety or operability issues. A “B” indicates that the issue needs to be dealt with as quickly as possible, but is not urgent. These items will usually result in a process improvement or will help avoid future “urgent” issues. A “C” indicates that the issue should be dealt with at the earliest convenience, but is not a priority issue. This category might include issues related to aesthetics, non-urgent maintenance, or housekeeping improvements which are not safety related.

Note that HDR inspections are generally performed while equipment is operating, and are not intended to address the internal condition, performance or life

expectancy of mechanical, electrical and electronic equipment and structures. HDR inspections are only performed quarterly, generally representing findings on the day of the inspection. CAAI is responsible, without limitation, for operations, maintenance, environmental performance and safety and should not rely on HDR observations or inspection reports which are overviews of Facility external conditions only.

Table 1: Summary of Inspection Report Deficiencies

*A is highest priority & demands immediate attention; B needs attention, but is not urgent; C can be addressed at earliest opportunity & is not urgent.

Item No.	Inspection Report Deficiencies	Issue Reported	Priority*	HDR Recommendation	Status	Open / Closed
1	Corrosion on ceiling panels in Turbine Generator Enclosure	August 2014	C	Sand, Prime, Paint and Preserve, and replace deteriorated panels as necessary	HDR observed the corroded/deteriorated sections had been primed, but no panels were replaced. CAAI reports that it plans to replace panels in 1 to 2 years.	Open
2	Corrosion on ceiling panels in Turbine Generator Enclosure (Alternate Location)	August 2014	C	Sand, Prime, Paint and Preserve, and replace deteriorated panels as necessary	HDR observed the corroded/deteriorated sections had been primed, but no panels were replaced. CAAI reports that it plans to replace panels in 1 to 2 years.	Open
3	Deteriorated purlin east wall in Tipping Floor Enclosure	November 2014	C	Replace deteriorated purlin	CAAI reports that it will replace sections of the east wall of the Tipping Floor Enclosure as a 2016 Budget Item.	Open
4	Damaged curbing northeast corner of Facility near Citizen's Drop-off	November 2014	C	Repair curbing	CAAI reports that it will be completing curbing repairs throughout the facility grounds by the end of May 2016.	Open
5	Damaged curbing west side of Cooling Towers	November 2014	C	Repair curbing	CAAI reports that it will be completing curbing repairs throughout the facility grounds by the end of May 2016.	Open

Item No.	Inspection Report Deficiencies	Issue Reported	Priority*	HDR Recommendation	Status	Open / Closed
6	Damaged curbing near Ash Trailer Parking Area	November 2014	C	Repair curbing	CAAI reports that it will be completing curbing repairs throughout the facility grounds by the end of May 2016.	Open
7	Panels on east wall in Charging Floor damaged	February 2015	C	Replace damaged wall panels	Status Unchanged	Open
8	Induced Draft Fan No. 1 Lagging deteriorated, west side of CEMS Enclosure	May 2015	C	Replace deteriorated Induced Draft Fan Lagging	Status Unchanged	Open
9	Pot hole, southeast corner of Ash Trailer Canopy	August 2015	C	Repair road surface	Status Unchanged	Open
10	Ash Trailers (typical of 3) have a damaged top pressure-treated wood rail (2"x6")	November 2015	C	Contact ash hauling company and request repairs be made to ash trailers	Status Unchanged	Open
11	Holes in Ash Trailer (License Plate: 18 5294C) near ladder	February 2016	C	Report to ash hauling company and assure proper repairs are made	Status Unchanged	Open
12	Vertical posts on Cooling Tower Stairs split (typical of 5)	February 2016	A	Replace vertical posts	During the May 2016 site walk-through, HDR noted that 1 post had been capped with stainless steel. This item is in progress.	Open
13	Drainage pipe along east wall of Tipping Floor damaged	February 2016	C	Repair drainage pipe	Complete	Closed
14	Curbing damaged (Typical of 2 locations), along Truck Entrance Road	February 2016	C	Replace curbing	CAAI reports that it will be completing curbing repairs throughout the facility grounds by the end of May 2016.	Open
15	Chemical storage container deteriorated, north of Main Vibrating Pan, at ground elevation	February 2016	A	Replace storage container	Status Unchanged	Open
16	Siding and angle deteriorated; west side of SDA No. 1 Penthouse – See Figure 1 (Appendix B)	May 2016	C	Replace deteriorated siding and angle and conduct proper painting preservation measures.	Status Unchanged	Open
17	Siding angle deteriorated; east side of SDA No. 3 Penthouse – See Figure 2 (Appendix B)	May 2016	C	Replace deteriorated siding angle and conduct proper painting preservation measures.	Status Unchanged	Open

Item No.	Inspection Report Deficiencies	Issue Reported	Priority*	HDR Recommendation	Status	Open / Closed
18	Roof panels of Tipping Enclosure unfastened; overhead entrance – See Figure 3 (Appendix B)	May 2016	C	Fasten roof panels	Status Unchanged	Open
19	Curbing damaged at Tipping Floor Exit – See Figure 4 (Appendix B)	May 2016	C	Replace curbing	Status Unchanged	Open

4.0 Facility Performance

Monthly operating data provided by CAAI indicates that 93,652 tons of MSW were processed during Q4FY16, and a total of 94,222 tons of MSW including 2,262 tons of Special Handling Waste were received. Total ash production during the quarter was 18,703 tons, which represents 20.0% of the waste processed by weight. The average uncorrected steam production rate for Q4FY16 was 2.99 tons_{steam}/ton_{waste}, which is slightly higher (less than 0.1%) than the corresponding quarter in FY15. The slight increase in this metric does not correlate with the 3.6% increase in HHV, and is indicative of poorer boiler performance, possible error in reported steam flow, or some other currently unidentified cause. CLI has suggested that steam leaks are a root cause; HDR will pursue this during the August Facility inspections.

On an annual basis, 349,881 tons of MSW were processed during FY16, and a total of 352,049 tons of MSW and 8,567 tons of Special Handling Waste were received. Total ash production during FY16 was 71,401 tons, which represents 20.4% of the waste processed. The average uncorrected steam production rate for FY16 was 3.0 tons_{steam}/ton_{waste}, and slightly higher (less than 0.1%) than the corresponding period last year. The slight increase in this metric is attributable to the increase (1.1%) in the calculated average waste heating value that was experienced in FY16, as compared to FY15

Chart 1: Tons of Waste Processed

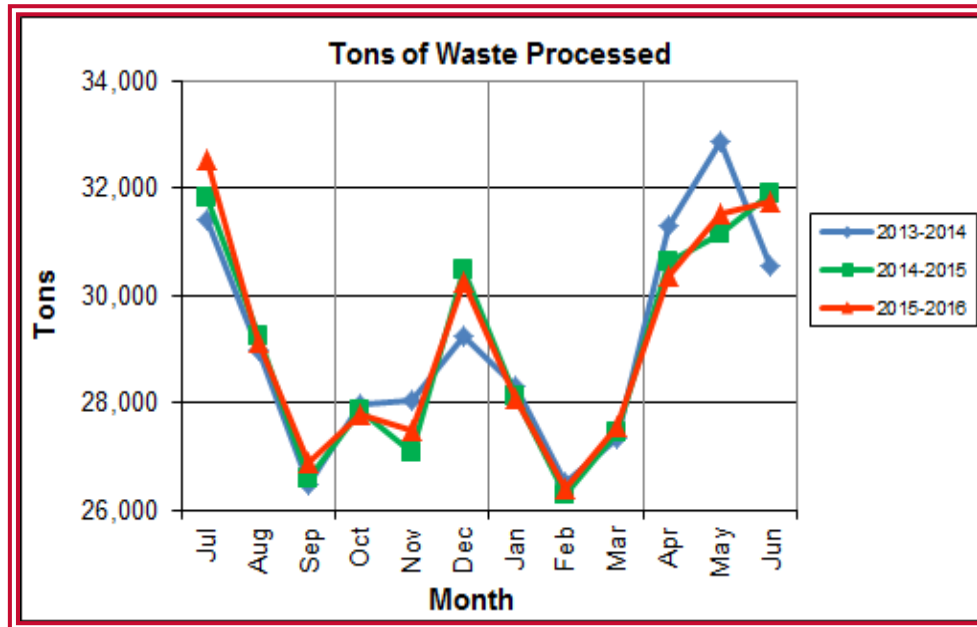


Chart 1 illustrates that Q4FY16 waste processed was slightly lower (less than 0.1%) than the corresponding quarter, Q4FY15.

CAAI reported that 475 tipping floor/MSW internal inspections were conducted during the quarter and two (2) notices of violation (NOVs) were issued to haulers in April 2016 for opening the tailgate on the tipping floor entrance ramp, and delivering a load of refrigerators.

Chart 2: Tons of Ash Produced per Ton of Waste Processed

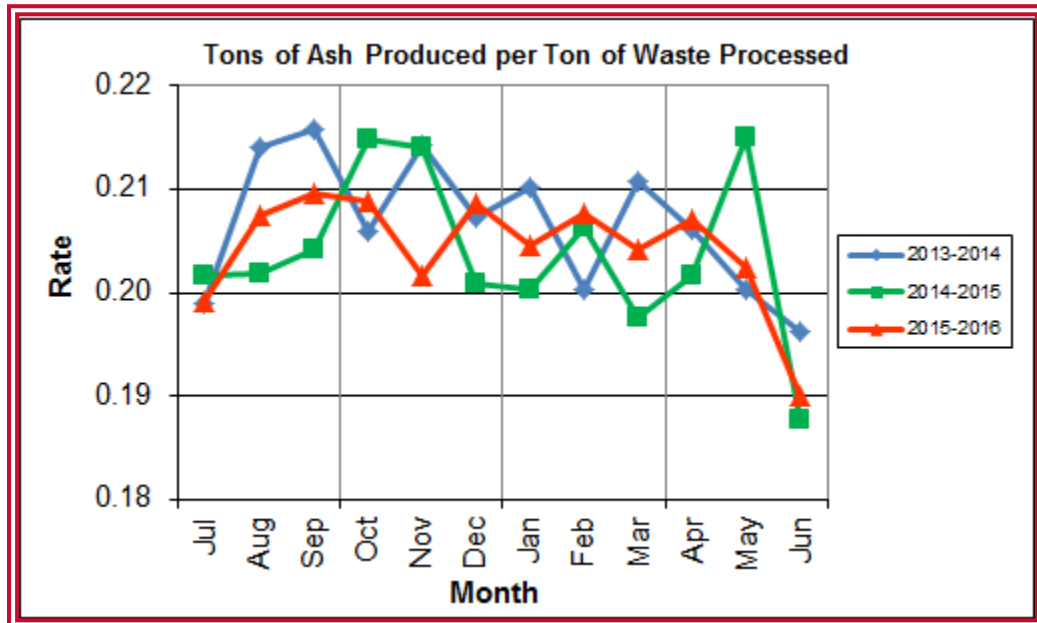


Chart 2 illustrates that the average ash production rate in Q4FY16 was lower (0.8%) at 20.0% of processed waste, compared to the corresponding quarter in FY15 when the rate was 20.1%. Ash production remains in the 20.0% to 21.0% range, as a result of the installation of the “semi-dry” ash discharger spray system in May 2012, and represents less moisture in the ash residue shipped to disposal.

The annual ash production rate for FY16 was identical to FY15 at 20.4%. This result compares very favorably with industry averages which are generally in the range of 25-28%.

Chart 3: Ferrous Recovery Rate

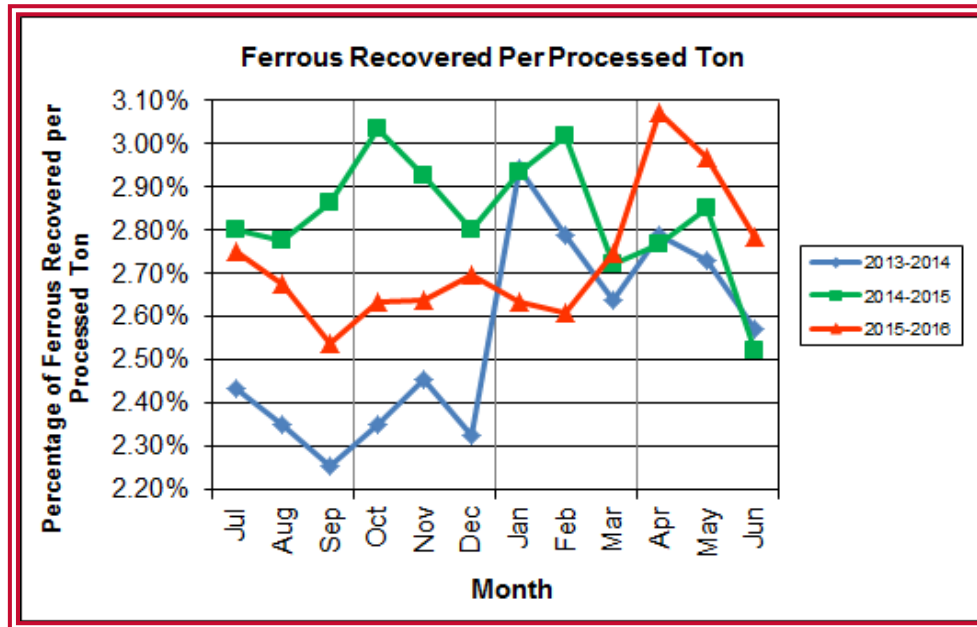
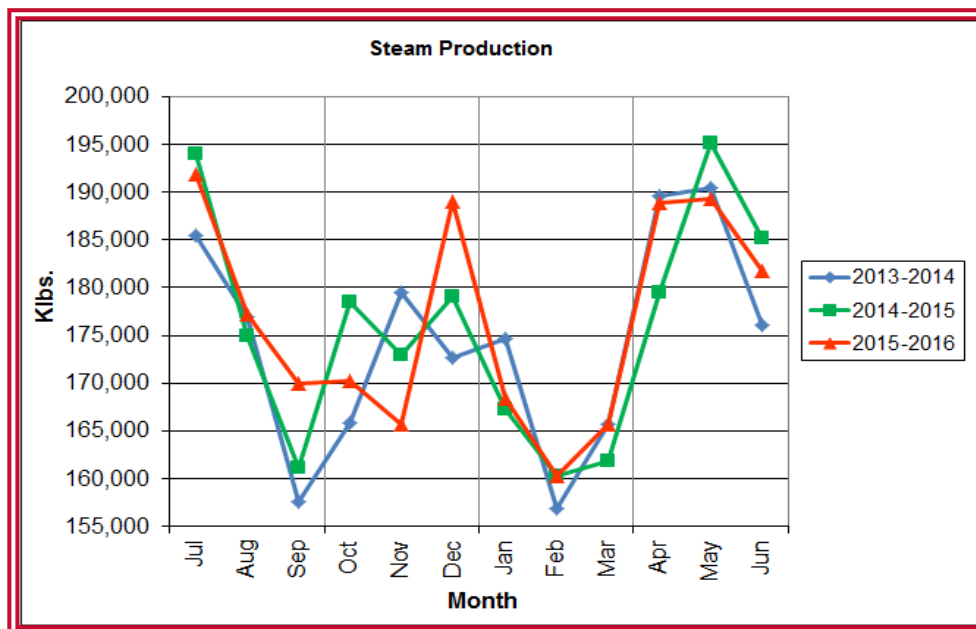


Chart 3 depicts the monthly ferrous metal recovery rate as a percentage of processed MSW tonnage. In Q4FY16, 2,753 tons of ferrous metals were recovered, which is 8.3% higher than the corresponding quarter in FY15 and equivalent to 2.9% of processed waste. CAAI reports that in recent months it was noted that the ferrous recovery rate had decreased and they replaced an end section of the vibrating pan which was worn due to wear from material getting caught between the pan and magnet. The positive impacts of the end section pan replacement is obvious in Chart 3 during Q4FY16 when compared to the previous nine (9) months of FY16 when the ferrous recovery rate was noticeably lower than the recovery rate in FY15.

In FY16, 9,571 tons of ferrous metals were recovered, which is 3.0% lower than FY15 and equivalent to 2.7% of processed waste. As depicted in Chart 3, the first nine (9) months of FY16 had a decreased ferrous recovery rate, compared to the same period in FY15, which was before the end section pan replacement occurred.

Chart 4: Steam Production



In Chart 4, the total steam production for Q4FY16 was 559,883 klbs., and slightly higher (less than 0.1%) than the corresponding quarter in FY15. The slight increase in steam generation was attributable to the increase (3.6%) in the calculated average waste heating value, offset by more downtime (20 additional hours) experienced by the boilers.

Annual steam production for FY16 was 2,118,125 klbs., or 0.4% higher than FY15 which produced 2,109,442 klbs. The increase in steam generation was attributable to the increase (1.1%) in the calculated average waste heating value, as well as less (111 fewer hours) scheduled, unscheduled, and standby downtime experienced by the boilers and an additional day of operations as a result of the Leap Year.

Chart 5: 12-Month Rolling Steam Production

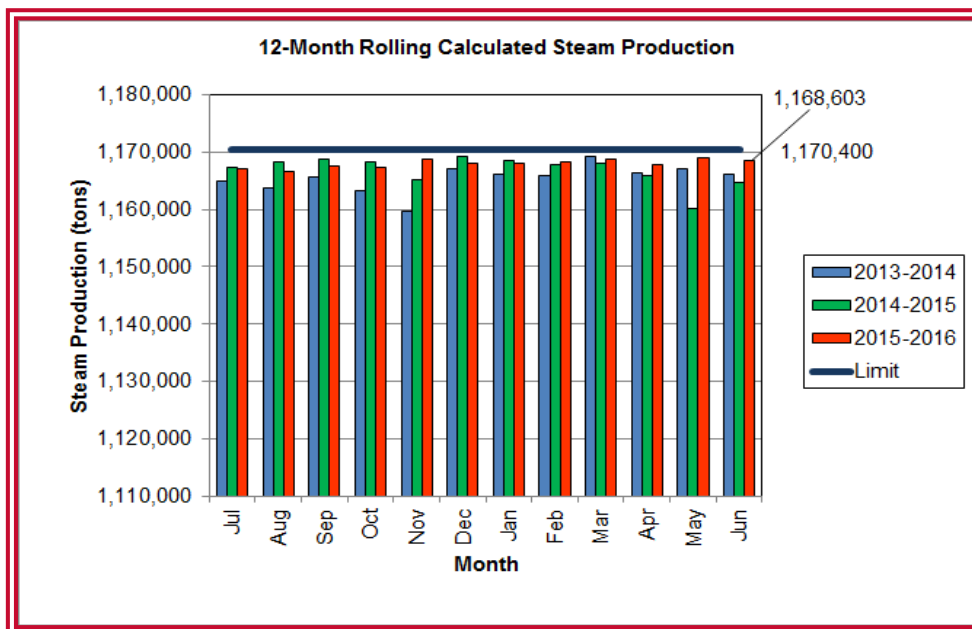
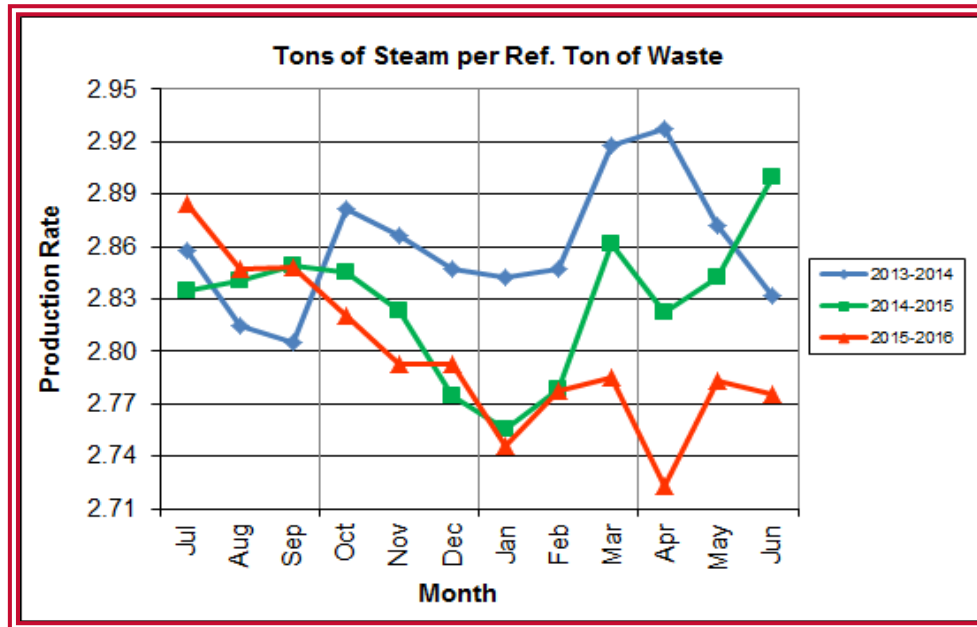


Chart 5 depicts the 12-month rolling steam production total for the period ending in June 2016. According to the Title V permit, the annual steam production for the Facility shall not exceed 1,170,400 tons on the basis of an average value of 3.34 lbs of steam per lb of MSW processed, calculated monthly as the sum of each consecutive 12 month period. The Facility was in compliance with the 12-month rolling steam production total every month in FY16. The 12-month rolling total for steam production ending in June 2016 was 1,168,603 tons which is 99.8% of the limit. Chart 5 clearly shows that Facility throughput, and in turn, steam and electricity production are being throttled to stay ever so slightly below the steam production limit nearly every month.

Chart 6: Steam Production Rate



In Chart 6, the conversion of raw waste tonnages into “reference tons” is another way of analyzing steam production, and helps to determine whether changes are related to boiler performance or to fuel issues. “Reference tons” are adjusted to account for the calculated average fuel heating value, so that lower Btu fuel raw tonnages are adjusted upwards and vice versa. In Q4FY16, this metric tracked lower (3.3%) at 2.8 tons_{steam/ton_{ref}}, compared to the corresponding quarter in FY15.

The annual steam production rate for FY16 was 2.8 tons_{steam/ton_{ref}}, which is lower (1.1%) than FY15. This chart shows that for the last four (4) months of FY16, a downtrend was experienced in the normalized steam production rate compared to the same period during the prior two (2) years. This trend should continue to be monitored to determine if it is indicative of poorer boiler performance, an aberration during scheduled outage periods, or some other currently unexplained cause.

Chart 7: Calculated Waste Heating Value

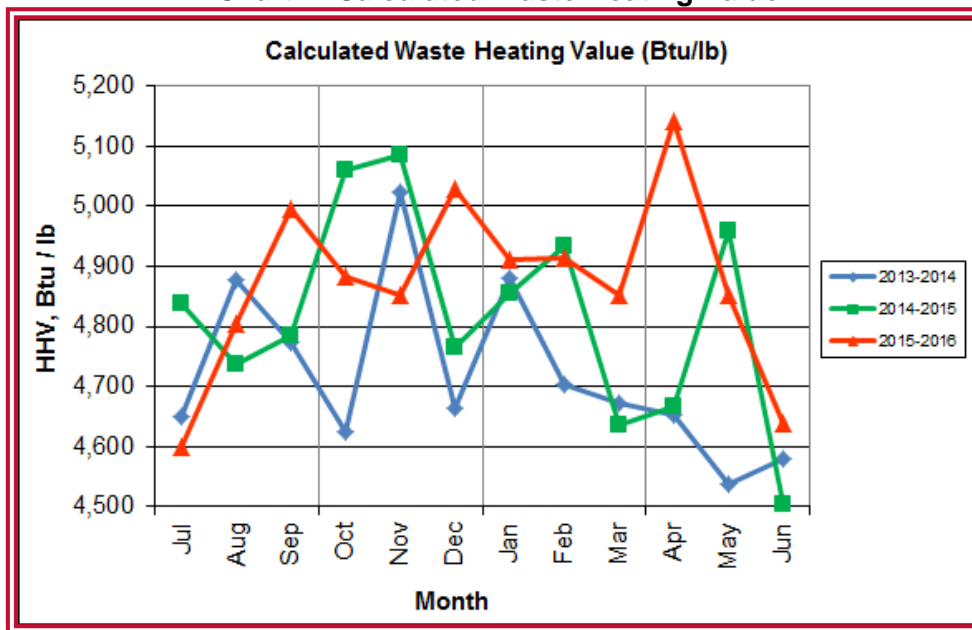


Chart 7 illustrates that Q4FY16 calculated average waste heating value was higher (3.6%) at 4,877 Btu/lb than the corresponding quarter Q4FY15, which averaged 4,710 Btu/lb.

In FY16, the annual average waste heating value was higher (1.1%) at 4,873 Btu/lb than FY15, which averaged 4,819 Btu/lb. Note that the FY16 annual average heating value of 4,873 Btu/lb is 8.3% higher than the facility design value of 4,500 Btu/lb.

Table 2: Quarterly Performance Summaries

Month		Waste Processed (tons)	Waste Diverted (tons)	Ash Shipped (tons)	Special Handling (Supplemental) (tons)	Ferrous Recovered (tons)	Steam Produced (klbs)	Net Electrical Generation (MWhr)
Q4FY14	Quarterly Totals	94,734	0	19,035	514	2,556	555,969	39,409
	April-14	31,317	0	6,454	253	873	189,568	13,568
	May-14	32,873	0	6,585	151	897	190,394	13,515
	June-14	30,544	0	5,996	110	786	176,007	12,326
Q4FY15	Quarterly Totals	93,695	0	18,870	1,842	2,541	559,721	36,175
	April-15	30,646	0	6,182	613	848	179,434	12,784
	May-15	31,160	0	6,701	531	889	195,150	11,786
	June-15	31,889	0	5,987	698	804	185,137	11,605
Q4FY16	Quarterly Totals	93,652	0	18,703	2,262	2,753	559,883	40,207
	April-16	30,356	0	6,289	996	932	188,882	13,853
	May-16	31,530	0	6,380	605	936	189,239	13,541
	June-16	31,766	0	6,034	661	885	181,762	12,813
FY16 Totals		349,881	0	71,401	8,567	9,571	2,118,125	148,529
FY15 Totals		348,686	0	71,019	5,413	9,864	2,109,442	145,085
FY14 Totals		349,118	0	72,071	3,549	8,922	2,091,123	143,064

Table 2 presents the production data provided to HDR by CAAI for Q4FY16 on both a monthly and quarterly basis. For purposes of comparison, data for Q4FY14 and Q4FY15 are also shown, as well as FY14, FY15 and FY16 YTD totals.

In comparing quarterly totals, the data shows:

- Less waste was processed in Q4FY16 than Q4FY15 and Q4FY14
- Less steam was generated in Q4FY16 than Q4FY15 and Q4FY14
- Significantly more electricity was generated in Q4FY16 than Q4FY15 and Q4FY14
- Significantly more supplemental waste was received in Q4FY16 than Q4FY15 and Q4FY14.

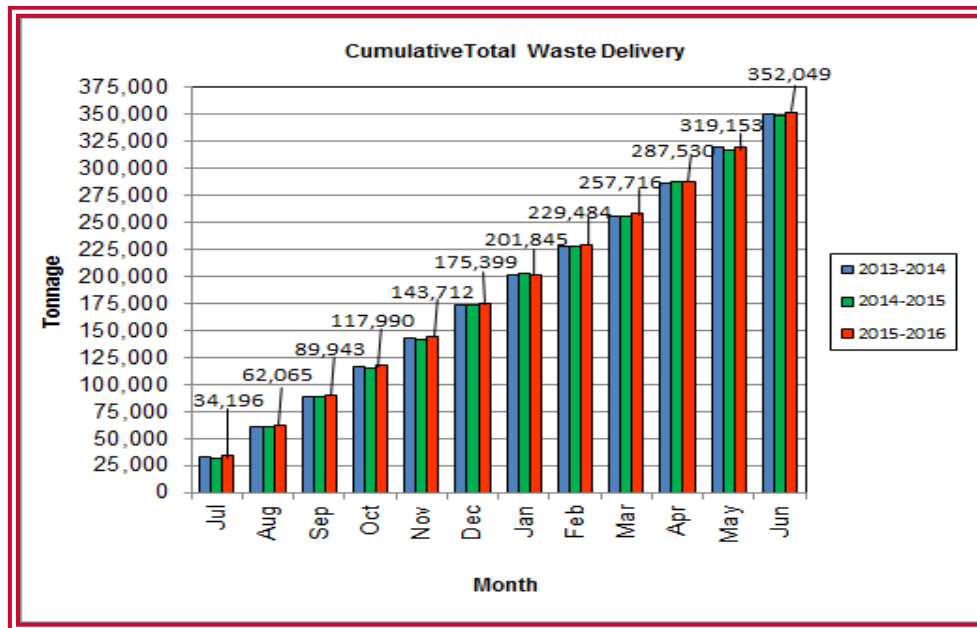
Please note that the total steam generation figures presented in Table 2 do not correlate with the annual steam production limit from the Facility Permit; such limits apply on a 12-month rolling average monthly basis, and not a fiscal year basis. It is also worth noting that the quantity of waste processed during Q4FY16 and FY16 continues to be limited by the steam production permit restrictions (refer to Chart 5).

Table 3: Waste Delivery Classification

		Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Totals	% of Total
FY12	Jurisdiction Waste	18,112	20,021	19,304	17,796	17,523	17,211	16,202	14,952	17,430	18,338	20,138	18,361	215,381	61.89%
	Spot Waste tons	8,901	13,623	13,303	9,788	11,976	11,900	10,276	10,697	10,283	10,029	11,333	10,177	132,295	38.01%
	Supplemental Waste	10	10	34	15	15	21	12	22	15	23	68	91	336	0.10%
	MSW Totals	27,023	33,654	32,641	27,599	29,514	29,132	26,490	25,672	27,729	28,390	31,539	28,629	348,012	100.00%
FY13	Jurisdiction Waste	19,413	18,357	16,632	17,625 ⁽¹⁾	18,838	16,195	-	-	-	-	-	-	107,058	30.76%
	Spot Waste tons	10,516	11,326	10,610	10,317	9,330	9,558	-	-	-	-	-	-	61,656	17.72%
	City Waste	-	-	-	-	-	-	1,683 ⁽¹⁾	1,287	1,444	2,382	2,286	1,919	11,000	3.16%
	County Waste	-	-	-	-	-	-	2,442 ⁽¹⁾	2,100	2,372	3,381	3,932	3,309	17,536	5.04%
	Municipal Solid Waste	-	-	-	-	-	-	25,019 ⁽¹⁾	23,637	21,661	27,066	25,794	24,930	148,107	42.56%
	Supplemental Waste	151	11	80	25	234	405	363	365	76	403	281	271	2,665	0.77%
	MSW Totals	29,928	29,683	27,241	27,942	28,167	25,753	29,507	27,388	25,552	33,231	32,293	30,429	348,022	100.00%
FY14	City Waste	2,065	1,693	1,702	1,924	1,566	1,780	1,529	1,231	1,556	2,256	2,203	1,883	21,389	6.11%
	County Waste	3,459	3,079	2,784	3,091	2,707	2,802	2,568	1,957	2,272	3,326	3,987	3,387	35,419	10.12%
	Municipal Solid Waste	26,167	23,604	22,034	23,354	21,879	25,531	23,869	22,523	23,198	25,414	27,206	24,812	289,590	82.75%
	Supplemental Waste	546	676	248	410	188	268	275	192	231	253	151	110	3,548	1.01%
	MSW Totals	32,237	29,053	26,768	28,779	26,340	30,380	28,241	25,903	27,256	31,249	33,546	30,193	349,946	100.00%
FY15	City Waste	1,814	1,497	1,699	1,737	1,518	1,770	1,411	1,209	1,648	2,155	2,059	2,045	20,562	5.91%
	County Waste	3,297	2,868	2,973	3,095	2,508	2,852	2,358	1,833	2,411	3,269	3,652	3,572	34,687	9.96%
	Municipal Solid Waste	26,661	24,466	21,887	21,241	21,678	27,906	24,611	20,915	24,094	25,189	23,126	25,667	287,442	82.57%
	Supplemental Waste	141	275	329	521	764	529	389	351	272	613	531	698	5,413	1.55%
	MSW Totals	31,913	29,106	26,888	26,595	26,468	33,057	28,769	24,308	28,424	31,225	29,369	31,982	348,105	100.00%
FY16	City Waste	1,960	1,563	1,723	1,645	1,685	1,872	1,147	1,619	1,811	2,024	1,950	2,220	21,219	6.03%
	County Waste	3,627	2,880	2,832	2,869	2,682	2,891	2,025	2,389	2,694	2,406	2,508	2,661	32,465	9.22%
	Municipal Solid Waste	27,933	22,999	22,552	22,850	20,679	26,138	22,632	22,781	22,935	24,388	26,561	27,355	289,801	82.32%
	Supplemental Waste	676	427	771	684	676	787	642	850	792	996	605	661	8,565	2.43%
	MSW Totals	34,196	27,869	27,878	28,047	25,722	31,687	26,446	27,639	28,232	29,814	31,623	32,896	352,049	100.00%

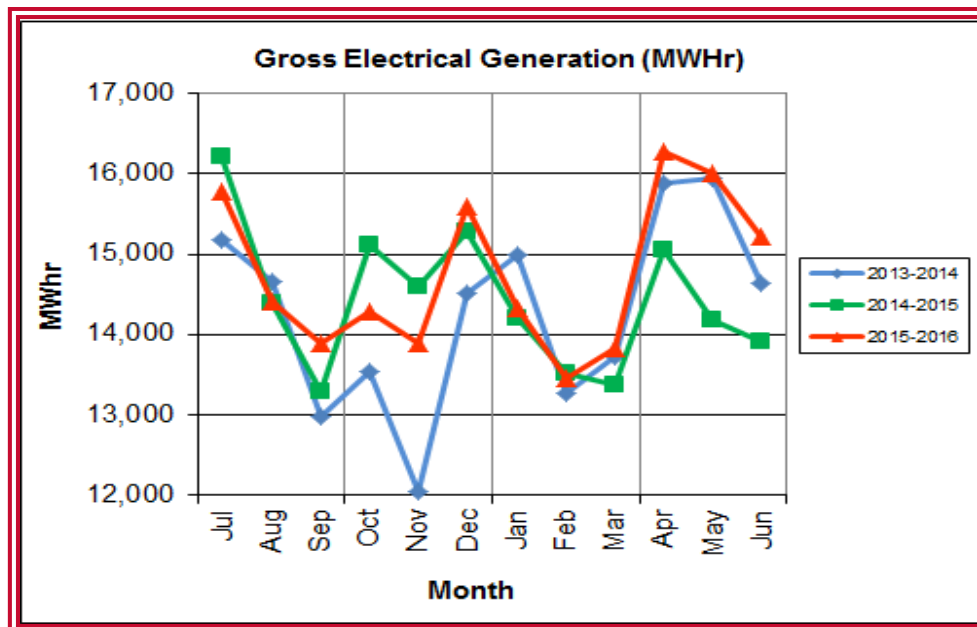
Note (1): Beginning January 2013, the method in which waste was classified was modified as compared to prior periods due to change in contractual obligations and plant ownership

Chart 8: Cumulative Total Waste Delivery



As depicted in Table 3 and Chart 8, for the period ending in June 2016; cumulative total waste delivery was 1.1% more compared to the same period in FY15.

Chart 9: Gross Electrical Generation

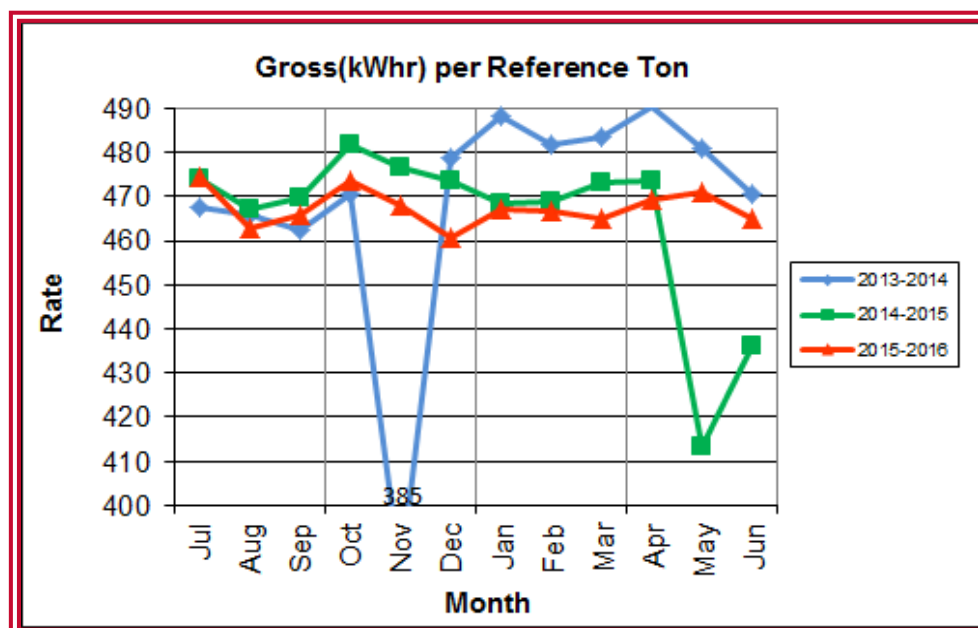


During Q4FY16, the Facility generated 47,521 MWhrs (gross) of electricity compared to Q4FY15 generation of 43,162 MWhrs (gross), a 10.1% increase.

The significant increase in gross electrical generation in Q4FY16 as compared to Q4FY15 is attributable to the slight increase in steam production and significantly less downtime (450 fewer hours) experienced by the Turbine Generators. Note that the sharp spikes depicted in Chart Nos. 10 through 14 for the months of May and June 2015 are a result of significant downtime (424.7 hours) experienced by Turbine Generator No. 1 to repair an exciter failure in the generator. A similar spike is depicted in the same charts for November 2013 as a result of Turbine Generator No. 2 experiencing significant downtime (494.8 hours) for a Major Overhaul.

During FY16, the Facility generated 176,967 MWhrs (gross) of electricity compared to the FY15 generation of 173,145, a 2.2% increase. The increase in gross electrical generation in FY16 as compared to FY15 is attributable to the increase in steam production, as well as less (225.7 fewer hours) scheduled, unscheduled, and standby downtime experienced by the turbine generators. Also note that 2016 is a Leap Year and February 2016 had an additional day of operations, when compared to the prior 2 operating years, which positively biases processed tonnage, steam production, and in this instance, electrical generation.

Chart 10: Gross Conversion Rate



As shown in Chart 10, the average gross electrical generation per reference ton of refuse processed during Q4FY16 was 468 kWhr, which is 6.3% higher than the corresponding quarter in FY15, and is attributable to less downtime experienced by the turbine generators during the quarter when compared to the corresponding quarter in FY15 when repairs were made as a result of the Turbine Generator No. 1 exciter failure. Since this calculated value uses reference or normalized tonnages of waste, it should cancel the effect of MSW heating value (Btu content) variability.

During FY16, the average gross electrical generation per reference ton of refuse processed was 467 kWhr, which is higher (0.6%) than FY15.

Chart 11: Net Conversion Rate

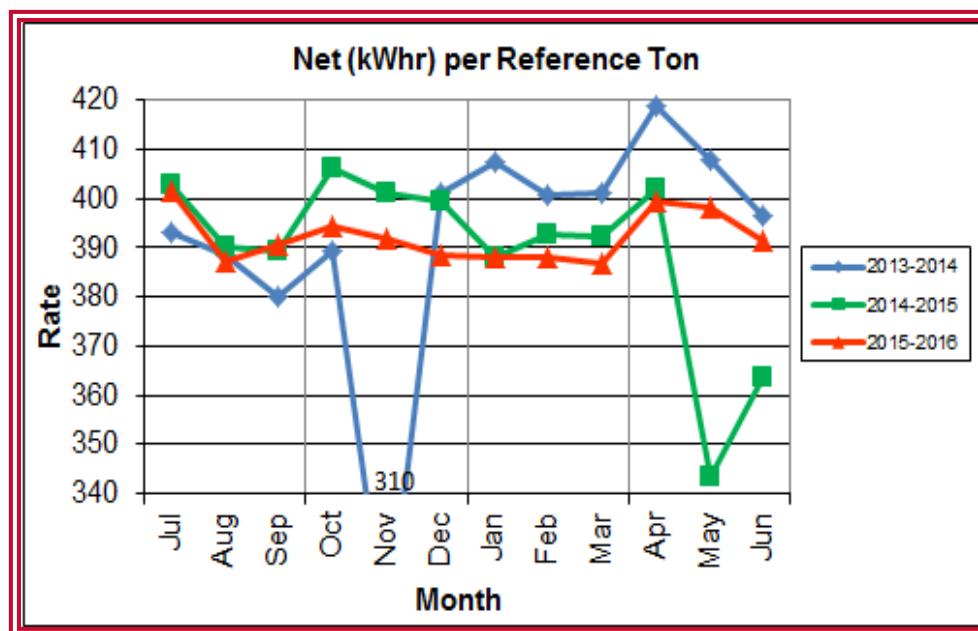


Chart 11 depicts the normalized net power (gross minus in-house usage) generation history. In Q4FY16, the average net electrical generation per reference ton was 396 kWhr, which is 7.2% higher than the corresponding quarter in FY15, and again, attributable to less downtime experienced by the Turbine Generators during the quarter, when compared to the corresponding quarter last fiscal year.

In FY16, the average net electrical generation per reference ton was 392 kWhr, which is 0.8% higher than FY15.

Chart 12: Net Conversion Rate

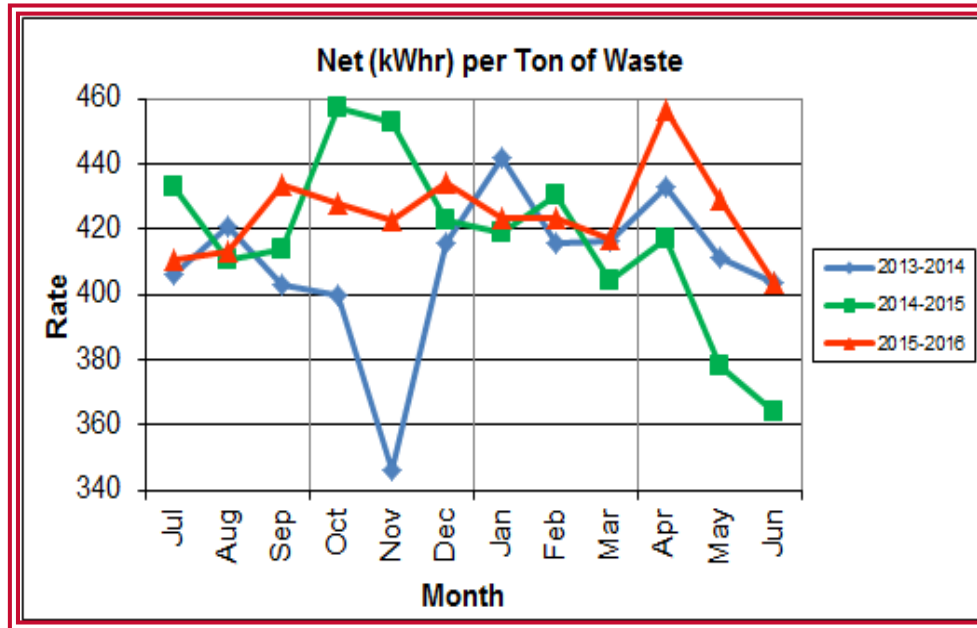
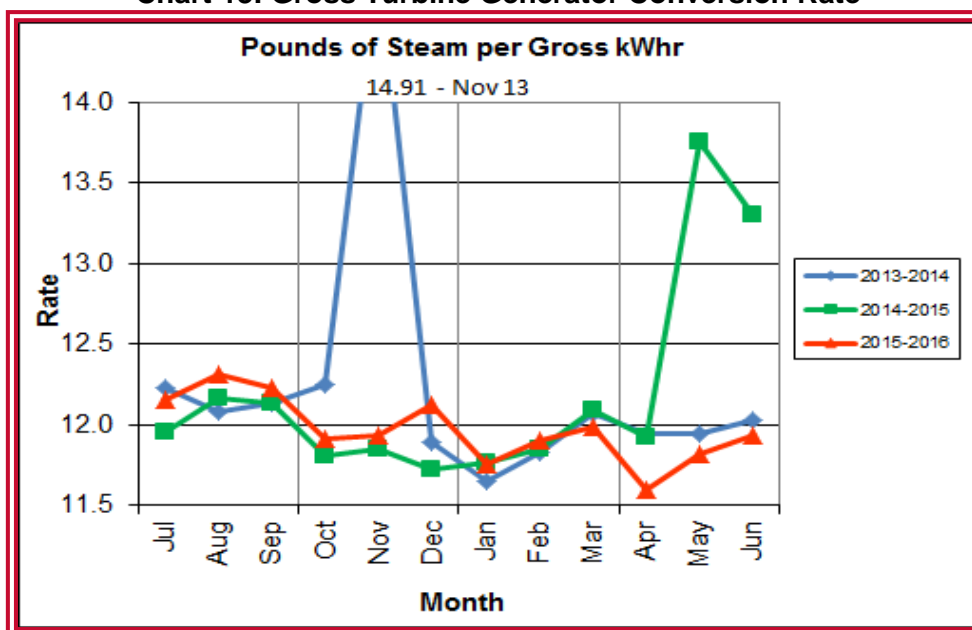


Chart 12 depicts the net power generation per processed ton. The net electrical generation per processed ton in Q4FY16 was 430 kWhr, which is 11.2% higher than the corresponding quarter in FY15, and attributable to less downtime experienced by the turbine generators and higher (3.6%) calculated waste heating value, when compared to the corresponding quarter last fiscal year.

In FY16, the net electrical generation per processed ton was 425 kWhr which is 1.8% higher than FY15.

Chart 13: Gross Turbine Generator Conversion Rate

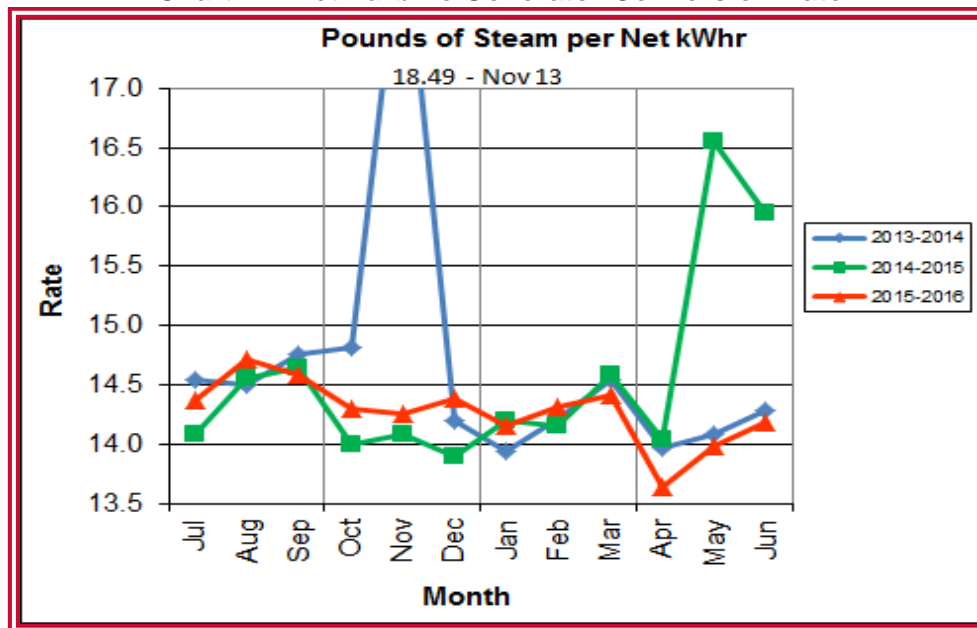


Charts 13 and 14 illustrate the quantities of steam required to generate one (1) kWhr of electricity, gross and net respectively. This measure is a turbine generator performance indicator, where lower steam rates indicate superior performance. For simplification, this calculated rate is based on the average for the two turbine generators. In Q4FY16 the average lbs of steam consumed per gross kWhr generated was 11.8, which is significantly lower (9.2%) than the corresponding quarter Q4FY15, and attributable to less downtime experienced by the turbine generators. Another factor that negatively impacts this metric is Turbine Generator No. 2 continues to operate with its Stage 9 blades removed from the rotor. CAAI reported that during the Turbine Generator No. 2 overhaul in November 2013, some cracking was observed on the Stage 9 blades of the rotor, and the blading in that row was removed as a precautionary measure. CAAI originally indicated that a new set of blades would be manufactured and installed during a Turbine Generator No. 2 Outage in 2016, but advised in May 2015, that the implementation of the replacement blades installation would be delayed, and did not provide a date for repair. The average lbs of steam consumed per net kWhr was 13.9, which is significantly lower (9.2%) than the corresponding quarter in FY15. The average steam temperature during the quarter was 690.4° F, which is 1.4% higher than the average steam temperature

of the corresponding quarter last fiscal year and 9.6° F lower than design temperature of 700° F.

In FY16, the average lbs of steam consumed per gross kWhr was 12.0, which is 1.8% lower than the rate in FY15, noting that for this metric, lower steam consumption represents improved performance. The average lbs of steam consumed per net kWhr in FY16 was 14.3, which is 1.9% lower than the rate in FY15. The average steam temperature for FY16 was 680.5° F, which is slightly higher (less than 0.1%) than the steam temperature in FY15 and 19.5° F lower than the design temperature of 700° F.

Chart 14: Net Turbine Generator Conversion Rate



4.1 Utility and Reagent Consumptions

Table 4: Facility Utility and Reagent Consumptions

Utility	Units	Q4FY16 Total	Q4FY15 Total	Q4FY16"Per Processed Ton" Consumption	Q4FY15"Per Processed Ton" Consumption	FY16 Total	FY15 Total
Purchased Power	MW hr	5,651	5,477	0.06	0.06	22,242	22,001
Fuel Oil	Gal.	11,590	5,640	0.12	0.06	41,110	35,920
Boiler Make-up	Gal.	1,794,000	2,090,000	19.16	22.31	7,813,000	8,501,000
Cooling Tower Make-up	Gal.	42,074,659	44,595,720	449.27	475.97	146,912,669	143,594,395
Pebble Lime	Lbs.	1,344,000	1,386,000	14.35	14.79	5,378,000	5,254,000
Ammonia	Lbs.	183,000	159,000	1.95	1.70	663,000	632,000
Carbon	Lbs.	98,000	102,000	1.05	1.09	404,000	408,000
Dolomitic Lime	Lbs.	138,000	294,000	1.47	3.14	701,800	995,200

Fuel oil usage during the quarter represents approximately 0.19% of the total heat input to the boilers, which compares favorably with industry averages, and slightly higher than the percentage of heat input in Q4FY15 which was 0.09%. Fuel oil is used to stabilize combustion of wet fuel, as well as during start-up and shut-down of the boilers for maintenance. Boiler makeup water usage during the quarter represents 2.7% of steam flow, which is lower than the boiler makeup in Q4FY15 which was 3.1%, and is acceptable. Pebble lime usage, at 1,344,000 lbs. is lower (3.0%) than the corresponding quarter last year, and the quarterly consumption rate of 14.4 lbs/ton is below historical levels (16-18 lbs/ton).

In comparing Q4FY16 to Q4FY15 on a per processed ton consumption basis:

- the purchased power consumption rate was 3.2% higher
- the total fuel oil consumption rate was 105.6% higher
- the boiler make-up water consumption rate was 14.1% higher
- the cooling tower make-up water consumption rate was 5.6% lower
- the total pebble lime consumption rate was 3.0% lower
- the ammonia consumption rate was 15.2% higher
- the carbon consumption rate was 3.9% lower
- the total dolomitic lime consumption rate was 53.0% lower

Note that following the February 2016 FMG Meeting, CAAI provided 3 year historical dolomitic lime usage based on deliveries, starting silo inventory, and

ending silo inventory. CAAI reports that the significant decrease in dolomitic lime usage during the quarter, when compared to the corresponding quarter last year, is attributable to a dolomitic lime silo level detector malfunction from June 25, 2015 through July 9, 2015. As a result of this malfunction, CAAI stated that delivery totals were utilized as usage totals during those months last fiscal year. CAAI also reported that they have been decreasing usage in recent months based on pH levels (average in-house pH of 9.4 during Q4FY16).

4.2 Safety & Environmental Training

The Facility had no recordable accidents during the quarter and has operated 166 days without an OSHA recordable incident through the end of September 2015. During the quarter, Safety and Environmental training was conducted with themes as follows:

April 2016

- Safety:
 - Hearing Conservation
 - Bloodborne Pathogens
 - Hand and Finger Injuries and Prevention
 - Grinder Safety
- Environmental:
 - Spill Prevention Control
 - Countermeasure Plan

May 2016

- Safety:
 - Confined Spaces
 - Fall Protection and Prevention
 - Teamwork and Communication
- Environmental:
 - The Three R's (Recognizing, Reporting, and Responding)
 - Environmental Awareness

June 2016

- Safety:
 - Emergency Action Plan
 - Fire Extinguisher Usage
 - Flammable/Combustible Storage
 - First Aid and Medical Emergencies
- Environmental:
 - Metals Recovery
 - Ash Re-use

5.0 Facility Maintenance

Throughout the quarter, significant routine and preventative maintenance was performed. HDR considers that the Facility is implementing an effective maintenance regimen, and is performing routine and preventative maintenance, along with selected equipment replacements in a timely manner. CAAI monthly maintenance reports provide a detailed account of maintenance performed.

Beginning June 27, 2016 Boiler No. 2 experienced 25.3 hours of downtime for a scheduled cleaning outage. Some significant maintenance activities that occurred during the outage were:

- Change-out of three (3) broken grate bars
- Replacement of coupling, bearing housings, bearings, seals, on Over Fire Air Fan
- Change-out of motor and flexible conduit on Over Fire Air Fan

In addition to the scheduled maintenance, CAAI reports that 811 preventative maintenance actions were completed during the quarter.

5.1 Availability

Facility availabilities for Q4FY16 are shown in Table 5. According to CAAI reports, the average unit availabilities for Boiler Nos. 1, 2, and 3 for Q4FY16 were 99.5%, 98.8%, and 99.1%, respectively. The three-boiler average availability during the quarter was 99.2%, which is excellent.

During Q4FY16, the average availability for Turbine Generator Nos. 1 and 2 was 100.0% and 99.7%, respectively. The two-turbine generator average availability during the quarter was 99.9%, which is excellent.

Overall boiler availability for FY16 was 96.5%, and overall turbine generator availability was 98.9%. Overall availabilities for the boilers are highly acceptable and above industry averages, noting that these reported availability metrics exclude standby time experienced during the fiscal year which amounted to 322.1 hours for the boilers and 347.1 hours for the turbine generators.

Table 5: Quarterly Facility Unit Availabilities

Availability	Q1FY16 Average	Q2FY16 Average	Q3FY16 Average	Q4FY16 Average	FY16 Average
Boiler No. 1	94.1%	100.0%	92.8%	99.5%	96.6%
Boiler No. 2	97.9%	94.6%	93.9%	98.8%	96.3%
Boiler No. 3	98.5%	94.4%	93.8%	99.1%	96.5%
Avg.	96.8%	96.3%	93.5%	99.2%	96.5%
Turbine No. 1	99.0%	100.0%	93.8%	100.0%	98.2%
Turbine No. 2	99.1%	100.0%	99.5%	99.7%	99.6%
Avg.	99.0%	100.0%	96.6%	99.9%	98.9%

5.2 Downtime Summary

Table 6: Boiler Downtime – Q4FY16

Boiler Number	Outage Begin Date	Outage End Date	Hours Unavailable	Downtime Classification	Reason Unavailable
1	5/5/16	5/5/16	10.7	Unscheduled	Grate bar failure
3	6/25/16	6/25/16	19.5	Unscheduled	Tube leak repairs
2	6/27/16	6/28/16	25.3	Scheduled	Boiler No. 2 scheduled cleaning outage
Total Unscheduled Downtime			30.2 Hours		
Total Scheduled Downtime			25.3 Hours		
Total Standby Downtime			0.0 Hours		
Total Downtime			55.5 Hours		

Table 7: Turbine Generator Downtime – Q4FY16

Turbine Generator Number	Outage Begin Date	Outage End Date	Hours Unavailable	Downtime Classification	Reason Unavailable
2	5/19/16	5/19/16	6.7	Unscheduled	Condenser tube leak repairs
Total Unscheduled Downtime			6.7 Hours		
Total Scheduled Downtime			0.0 Hours		
Total Standby Downtime			0.0 Hours		
Total Downtime			6.7 Hours		

5.3 Facility Housekeeping

CAAI is performing Facility housekeeping and maintaining plant cleanliness in accordance with acceptable industry practices. A site inspection was conducted in May 2016. At the time of the inspection, new deficiencies were recorded and prior deficiencies were given a status update. Photos of interest from the inspection are depicted in Appendix B. The Facility housekeeping ratings from the February 2016 inspection are presented in Table 8.

Table 8: Facility Housekeeping Ratings – May 2016

Facility Area	Acceptable	Needs Improvement	Unacceptable
Tipping Floor	√		
Citizen's Drop-off Area	√		
Tipping Floor Truck Exit	√		
Front Parking Lot	√		
Rear Parking Lot	√		
Boiler House Pump Room	√		
Lime Slurry Pump Room	√		
Switchgear Area	√		
Ash Load-out Area	√		
Vibrating Conveyor Area	√		
Ash Discharger Area	√		
Cooling Tower Area	√		
Truck Scale Area	√		
SDA/FF Conveyor Area	√		
SDA Penthouses	√		
Lime Preparation Area	√		
Boiler Drum Levels	√		
Turbine Room	√		
Electrical Room	√		

6.0 Environmental

The air pollution control equipment maintained emission concentrations well within the established regulations. Average Continuous Emission Monitoring System (CEMS) data collected for each monthly period during Q4FY16 are summarized in Appendix A. No permit deviations were reported by the Facility during Q4FY16.

On August 8, 2014, CAAI sent a letter to the Virginia Department of Environmental Quality (VADEQ) requesting relief from the steam permit limit requirements in the Facility's Title V and PSD permits. These requested changes relate to the permit values established for the calculated steam-to-waste ratio, which has resulted in a reduction of MSW throughput. In recent discussions, CAAI indicated that it is re-evaluating options to the proposed permit changes, and will provide further updates on this issue.

6.1 Nitrogen Oxide Emissions

During Q4FY16, the monthly emission concentrations of nitrogen oxides (NO_x) averaged 161.0 ppmdv, 160.7 ppmdv and 161.0 ppmdv for Boiler Nos. 1, 2, and 3, respectively. CAAI continues to operate the units at the lower (160 ppmdv) set-points, except immediately following a scheduled outage and associated boiler cleaning.

6.2 Sulfur Dioxide Emissions

During Q4FY16 the monthly emission concentration of stack sulfur dioxide (SO₂) averaged 1.7 ppmdv, 0.7 ppmdv, and 1.3 ppmdv for Boiler Nos. 1, 2, and 3, respectively. All of these stack SO₂ concentrations are significantly below the 40 CFR Subpart Cb requirement of 29 ppmdv @ 7% O₂.

6.3 Carbon Monoxide Emissions

During Q4FY16, the average CO emission concentrations on Boiler Nos. 1, 2, and 3 were 39.7 ppmdv, 38.3 ppmdv, and 37.3 ppmdv, respectively, and all are

well within permit limits (100 ppm_{dv}, hourly average). However, as reported by HDR during the May 2016 FMG Meeting, CO averages have been trending higher over the past six (6) months on all three boilers, and CAAI has been requested to investigate and mitigate this uptrend. While not a permit issue, it is indicative of poorer boiler performance and combustion efficiency.

6.4 Opacity

During Q4FY16, the average opacity for Boiler Nos. 1, 2, and 3 was 1.4%, 0.1%, and 0.8% respectively. All of these averages are significantly below the 10% (6-minute) average permit limit.

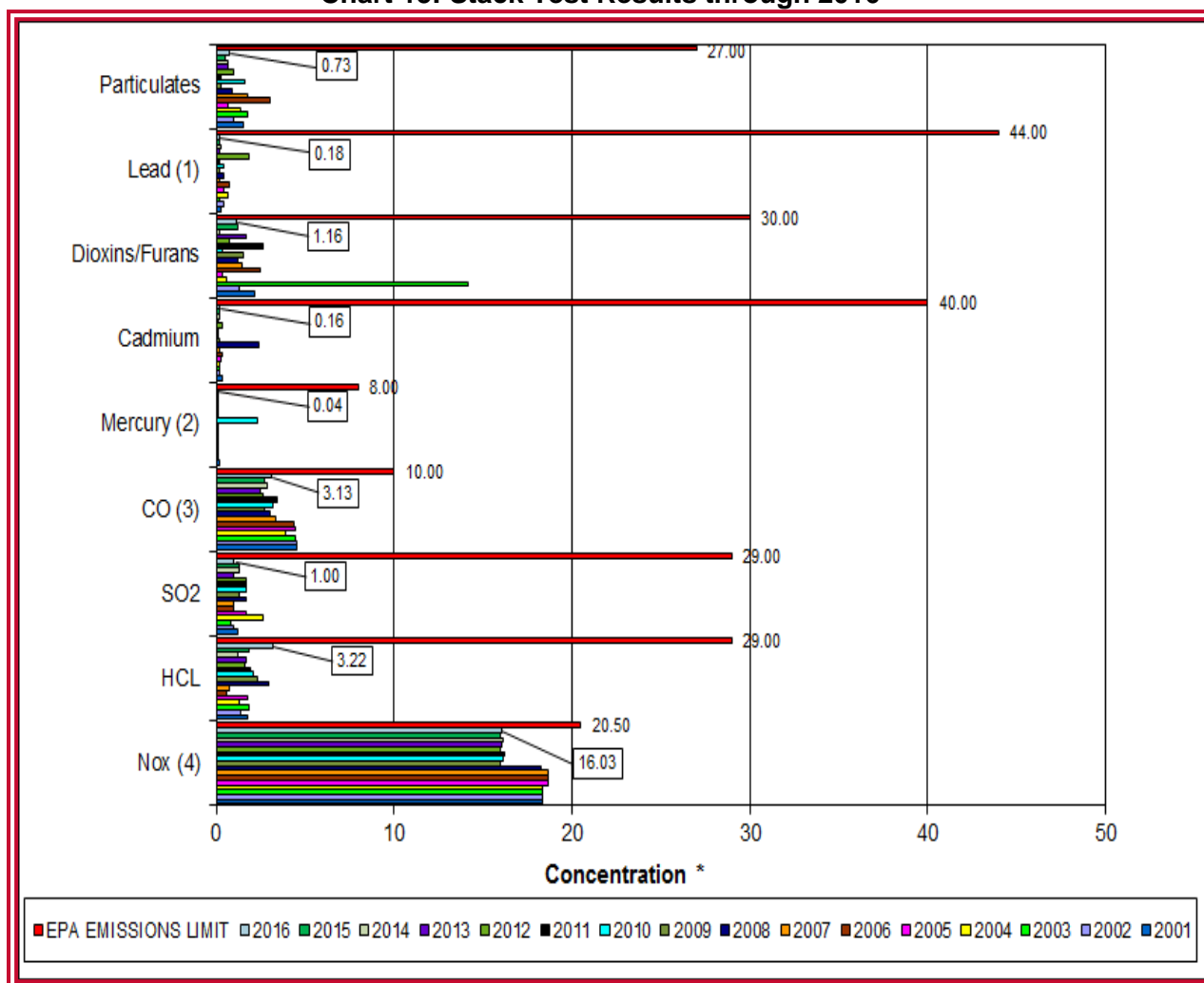
6.5 Daily Emissions Data

Appendix A, Tables 10, 11, and 12 tabulate the monthly average, maximum, and minimum emissions data for each unit during Q4FY16. Excursions, if any, would appear in bold print. It should be noted that these tabulations of monthly averages, reported here for informational purposes, are based on tabulations of daily averages. These averages do not correlate with official reports to the regulatory agencies because of differences in averaging times and other technical differences required by agency report formats.

6.6 2016 Annual Stack Testing

Annual stack testing was conducted March 21st through March 23rd, 2016 by Testar Inc. Historical stack test data including 2016 results are summarized in Chart 15 and Table 9. The 2016 test results demonstrate compliance well within the permit limits for all parameters. In addition to the tests required by the Facility permit, additional tests for small particulate matter (PM < 2.5) were conducted. While there are no current regulatory limits established for PM < 2.5, average results for 2016 were 0.005 Gr/DSCF (grains per dry standard cubic foot) corrected to 7% O₂, compared to the 2015 Annual Stack Testing PM <2.5 Results which averaged 0.003 Gr/DSCF corrected to 7% O₂.

Chart 15: Stack Test Results through 2016



Note (1): Lead emissions have been decreased by a factor of 10 for trending purposes

Note (2): Mercury emissions have been decreased by a factor of 100 for trending purposes

Note (3): CO emissions have been decreased by a factor of 10 for trending purposes

Note (4): NO_x emissions have been decreased by a factor of 10 for trending purposes

Table 9: Stack Test Results through 2016

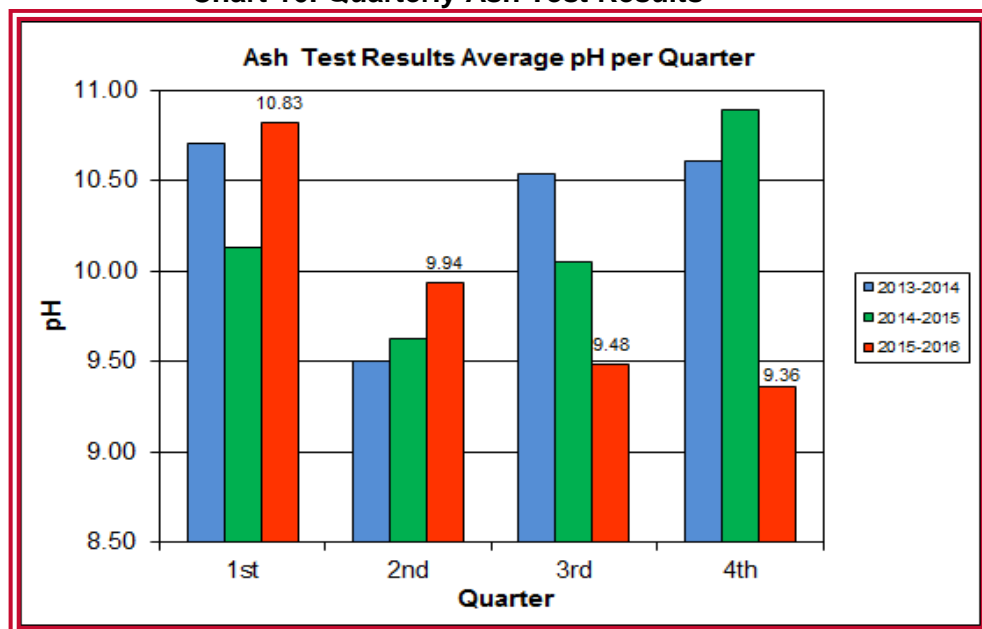
		NOx(4) (ppmdv)	HCL (ppmdv)	SO ₂ (ppmdv)	CO(3) (ppmdv)	Mercury(2) (ug/dscm)	Cadmium (ug/dscm)	Dioxins/Furans (ng/dscm)	Lead(1) (ug/dscm)	Particulates (mg/dscm)	P.M. 2.5 (gr/dscf)
2006	Boiler 1	187	0.85	1	43	0.38	0.4		7.79	4.84	--
	Boiler 2	185	0.483	1	47	0.4	0.19		2.51	2.15	--
	Boiler 3	189	0.529	1	42	0.4	0.57	2.48	12.4	2	--
	AVERAGE	187.0	0.62	1.00	44.00	0.39	0.39	2.48	7.57	3.00	--
2007	Boiler 1	187	0.82	1	31	0.38	0.25		2.31	2.03	--
	Boiler 2	185	0.68	1	36	0.39	0.19	1.42	2.12	2.04	--
	Boiler 3	189	0.84	1	34	0.59	0.16		1.55	1.33	--
	AVERAGE	187.0	0.78	1.00	33.67	0.46	0.20	1.42	1.99	1.80	--
2008	Boiler 1	181	2.96	2	37	0.45	6.60	1.25	9.4	1.46	--
	Boiler 2	182	3.52	2	30	0.42	0.50		2.6	0.82	--
	Boiler 3	186	2.43	1	24	1.03	0.16		0.23	0.48	--
	AVERAGE	183.0	3.0	1.67	30.3	0.63	2.4	1.25	4.1	0.9	--
2009	Boiler 1	159	1.40	2	28	0.184	0.191		2.260	0.483	--
	Boiler 2	158	2.12	1	25	0.271	0.143		0.894	0.068	--
	Boiler 3	163	3.53	1	29	0.198	0.256	1.54	3.030	0.155	--
	AVERAGE	160	2.35	1.33	27.33	0.22	0.20	1.54	2.061	0.235	--
2010	Boiler 1	159	2.69	1	29	5.76	0.120		1.33	3.690	0.00410
	Boiler 2	158	0.67	1	28	29.50	0.032	0.35	3.00	0.914	0.00630
	Boiler 3	168	2.85	3	38	34.70	0.241		8.71	0.336	0.00990
	AVERAGE	161.7	2.07	1.67	31.67	23.32	0.13	0.35	4.347	1.647	0.007
2011	Boiler 1	167	2.15	2	28	0.36	0.140	2.67	1.72	0.130	0.00570
	Boiler 2	159	1.14	1	38	0.44	0.140		1.46	0.350	0.00690
	Boiler 3	161	2.40	2	37	0.36	0.110		1.47	0.350	0.00170
	AVERAGE	162.3	1.90	1.67	34.33	0.39	0.13	2.67	1.550	0.277	0.005
2012	Boiler 1	163	1.14	2	23	0.30	0.310		1.34	0.640	0.00932
	Boiler 2	156	2.02	2	29	0.34	0.250	0.75	6.52	1.280	0.00782
	Boiler 3	161	1.66	1	27	0.37	0.590		47.80	1.020	0.00679
	AVERAGE	160.0	1.61	1.67	26.33	0.34	0.38	0.75	18.553	0.980	0.008
2013	Boiler 1	164	1.48	1	28	0.36	0.134		1.45	0.637	0.00637
	Boiler 2	158	1.98	1	25	0.37	0.112	1.66	1.05	0.737	0.00475
	Boiler 3	159	1.52	1	22	0.42	0.137		3.03	0.733	0.00471
	AVERAGE	160.3	1.66	1.00	25.00	0.38	0.13	1.66	1.843	0.702	0.005
2014	Boiler 1	167	1.13	2	35	0.33	0.270	0.16	3.82	0.282	0.00337
	Boiler 2	157	1.02	1	35	0.35	0.183		2.52	1.240	0.00415
	Boiler 3	161	1.50	1	17	0.49	0.228		2.85	0.520	0.00425
	AVERAGE	161.7	1.22	1.33	29.00	0.39	0.23	0.16	3.063	0.681	0.004
2015	Boiler 1	164	1.80	2	25	0.32	0.102		1.00	0.513	0.00540
	Boiler 2	157	1.99	1	29	0.38	0.109		1.30	0.532	0.00410
	Boiler 3	159	1.71	1	27	0.39	0.409	1.21	3.04	0.499	0.00074
	AVERAGE	160.0	1.83	1.33	27.00	0.36	0.21	1.21	1.778	0.515	0.003
2016	Boiler 1	166	4.33	1.0	29	0.46	0.231		2.81	1.170	0.00680
	Boiler 2	156	3.46	1.0	37	0.43	0.154	1.16	1.13	0.657	0.00241
	Boiler 3	159	1.86	1.0	28	0.38	0.107		1.59	0.371	0.00456
	AVERAGE	160.3	3.22	1.00	31.33	0.42	0.16	1.16	1.843	0.733	0.005
EPA EMISSIONS LIMIT		205	29	29	100	80	40	30	440	27	--
Percent of Limit for 2016		78.2%	11.1%	3.4%	31.3%	0.5%	0.4%	3.9%	0.4%	2.7%	--

6.7 Ash System Compliance

The dolomitic lime feed rate is adjusted periodically in order to maintain a desired ash pH level in the range of 8.0 to 11.0. Since initial startup, the feed rate has varied from between 1 to 9 lbs per ton each month. Ash Toxicity (TCLP) tests were not performed during Q4FY16.

CAAI also samples ash monthly in-house, and documents pH reading to adjust dolomitic lime feed rate. The results for the ash pH tests are found below in Chart 16 where each quarter is represented by the average of the respective monthly readings. During Q4FY16, the average ash pH for in-house tests was 9.4.

Chart 16: Quarterly Ash Test Results



APPENDIX A FACILITY CEMS DATA

Table 10: Unit #1 Monthly Summary for Reportable Emissions Data

Group#-Channel#		G8-C35	G8-C28	G8-C8	G8-C4	G8-C12	G8-C34	G8-C37	G8-C40	G8-C39
Long Descrip.		U-1 Steam	U-1 Econ	U-1 Stack	U-1 Stack	U-1 Stack	U-1 Opaci	U-1 FF In	U-1 Carbo	U-1 Lime
Short Descrip.		SteamFI	SO ₂ ec	SO ₂ sc	COsc	NO _x sc	Opacity	FF InTemp	CarbInj	LimeFlow
Units		K#/Hr	ppmc	ppm	ppmc	ppmc	%	deg F	#/hr	gpm
Range		0-100	0-2000	0-500	0-4000	0-1000	0-100	100-500	0-50	0-20
Apr-16	AVG	84.7	42.0	1.0	45.0	163.0	1.5	299.0	16.3	3.1
	Max	86.9	62.0	5.0	62.0	193.0	2.0	306.0	16.7	3.4
	Min	79.6	26.0	0.0	32.0	158.0	1.0	298.0	16.2	2.7
May-16	AVG	84.3	34.0	2.0	37.0	160.0	1.3	299.0	15.6	3.0
	Max	90.9	62.0	4.0	50.0	165.0	1.8	299.0	17.0	3.2
	Min	76.2	18.0	0.0	29.0	154.0	1.0	296.0	15.1	2.8
Jun-16	AVG	84.7	24.0	2.0	37.0	160.0	1.4	299.0	15.5	3.0
	Max	86.5	44.0	5.0	45.0	162.0	2.0	301.0	16.0	3.4
	Min	82.5	8.0	0.0	26.0	158.0	1.1	299.0	15.3	2.7
Quarter Average		84.6	33.3	1.7	39.7	161.0	1.4	299.0	15.8	3.0
Quarter Max Value		90.9	62.0	5.0	62.0	193.0	2.0	306.0	17.0	3.4
Quarter Min Value		76.2	8.0	0.0	26.0	154.0	1.0	296.0	15.1	2.7
Limits:		98	NA	29	100	205	10	333	16(a)	

(a) Carbon flow limit is a minimum value

* Note: The data reported herein represent 24 hour average data for all parameters. Emissions excursions that are measured on shorter time intervals (i.e., 4-hour block averages for CO) do not correlate with the 24 hour average data reported above.

Table 11: Unit #2 Monthly Summary for Reportable Emissions Data

Group#-Channel#		G8-C35	G8-C28	G8-C8	G8-C4	G8-C12	G8-C34	G8-C37	G8-C40	G8-C39
Long Descrip.		U-2 Steam	U-2 Econ	U-2 Stack	U-2 Stack	U-2 Stack	U-2 Opaci	U-2 FF In	U-2 Carbo	U-2 Lime
Short Descrip.		SteamFI	SO ₂ ec	SO ₂ sc	COsc	NO _x sc	Opacity	FF InTemp	CarbInj	LimeFlow
Units		K#/Hr	ppmc	ppm	ppmc	ppmc	%	deg F	#/hr	gpm
Range		0-100	0-2000	0-500	0-4000	0-1000	0-100	100-500	0-50	0-20
Apr-16	AVG	87.5	42.0	1.0	39.0	161.0	0.1	299.0	16.3	3.2
	Max	88.3	66.0	4.0	51.0	189.0	0.2	300.0	16.6	3.9
	Min	86.1	26.0	0.0	28.0	157.0	0.0	296.0	16.1	2.8
May-16	AVG	84.6	30.0	0.0	40.0	160.0	0.0	299.0	15.6	3.1
	Max	89.5	56.0	2.0	53.0	161.0	0.2	300.0	16.4	3.4
	Min	76.4	15.0	0.0	28.0	159.0	0.0	294.0	15.1	2.9
Jun-16	AVG	86.0	37.0	1.0	36.0	161.0	0.1	300.0	15.4	3.1
	Max	88.6	99.0	6.0	50.0	165.0	0.3	303.0	17.4	3.8
	Min	83.8	17.0	0.0	25.0	159.0	0.0	299.0	15.2	2.9
Quarter Average		86.0	36.3	0.7	38.3	160.7	0.1	299.3	15.8	3.1
Quarter Max Value		89.5	99.0	6.0	53.0	189.0	0.3	303.0	17.4	3.9
Quarter Min Value		76.4	15.0	0.0	25.0	157.0	0.0	294.0	15.1	2.8
Limits:		96	NA	29	100	205	10	330	16(a)	

(a) Carbon flow limit is a minimum value

* Note: The data reported herein represent 24 hour average data for all parameters. Emissions excursions that are measured on shorter time intervals (i.e., 4-hour block averages for CO) do not correlate with the 24 hour average data reported above.

Table 12: Unit #3 Monthly Summary for Reportable Emissions Data

Group#-Channel#		G8-C35	G8-C28	G8-C8	G8-C4	G8-C12	G8-C34	G8-C37	G8-C40	G8-C39
Long Descrip.		U-3 Steam	U-3 Econ	U-3 Stack	U-3 Stack	U-3 Stack	U-3 Opaci	U-3 FF In	U-3 Carbo	U-3 Lime
Short Descrip.		SteamFl	SO ₂ ec	SO ₂ sc	COsc	NO _x sc	Opacity	FF InTemp	CarbInj	LimeFlow
Units		K#/Hr	ppmc	ppm	ppmc	ppmc	%	deg F	#/hr	gpm
Range		0-100	0-2000	0-500	0-4000	0-1000	0-100	100-500	0-50	0-20
Apr-16	AVG	89.6	57.0	2.0	36.0	163.0	1.0	302.0	16.3	3.3
	Max	90.8	85.0	6.0	50.0	191.0	1.4	304.0	16.9	3.8
	Min	87.8	39.0	0.0	25.0	159.0	0.6	299.0	16.1	2.9
May-16	AVG	85.8	38.0	1.0	38.0	160.0	0.9	297.0	15.7	3.2
	Max	91.3	64.0	6.0	54.0	166.0	1.3	299.0	16.9	3.4
	Min	76.4	20.0	0.0	25.0	158.0	0.6	293.0	15.2	2.9
Jun-16	AVG	86.7	34.0	1.0	38.0	160.0	0.4	294.0	16.1	3.0
	Max	89.0	51.0	4.0	51.0	166.0	0.9	295.0	17.6	3.4
	Min	79.3	19.0	0.0	24.0	151.0	0.0	291.0	15.3	2.7
Quarter Average		87.4	43.0	1.3	37.3	161.0	0.8	297.7	16.0	3.2
Quarter Max Value		91.3	85.0	6.0	54.0	191.0	1.4	304.0	17.6	3.8
Quarter Min Value		76.4	19.0	0.0	24.0	151.0	0.0	291.0	15.2	2.7
Limits:		98	NA	29	100	205	10	327	16(a)	

(a) Carbon flow limit is a minimum value

* Note: The data reported herein represent 24 hour average data for all parameters. Emissions excursions that are measured on shorter time intervals (i.e., 4-hour block averages for CO) do not correlate with the 24 hour average data reported above.

APPENDIX B

SITE PHOTOS – MAY 2016



Figure 1: Siding and angle deteriorated; west side of SDA No. 1 Penthouse – New Deficiency



Figure 2: Siding angle deteriorated; east side of SDA No. 3 Penthouse – New Deficiency

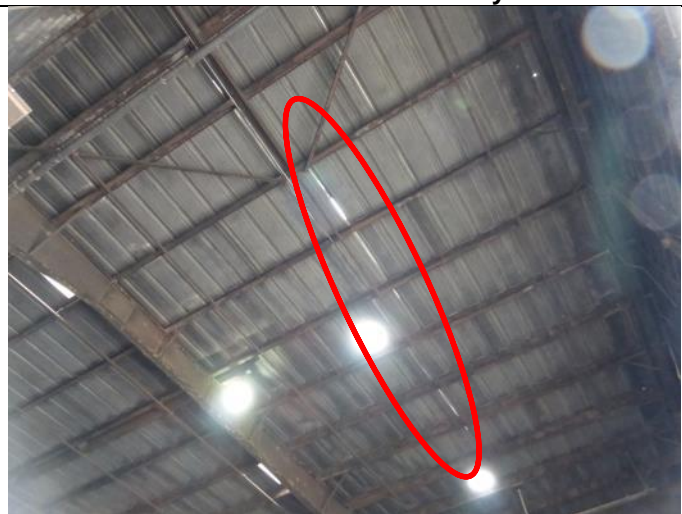


Figure 3: Roof panels of Tipping Enclosure unfastened; overhead entrance – New Deficiency



Figure 4: Damaged curbing at Tipping Floor Exit– New Deficiency

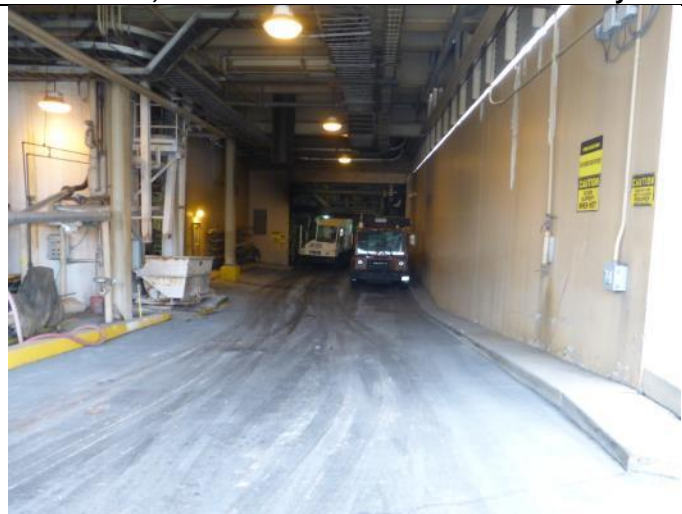


Figure 5: Ash/Metal Load-Out Area – No issues observed



Figure 6: Dolomitic Lime Silo and Induced Draft Fan No. 3



Figure 7: Ash Trailer Canopy



Figure 8: Cooling Towers – No issues observed



Figure 9: Recovered ferrous metal roll-off



Figure 10: White goods roll-off



Figure 11: Citizen's Drop Off roll-off



Figure 12: Facility Scales and Scale House – No issues observed



Figure 13: General Facility View – photo from scale exit



Figure 14: General Facility View – photo from across Eisenhower



Figure 15: General Facility View – Photo from Metro Entrance Road



Figure 16: Economizers and SDA No. 3 – No issues observed



Figure 17: Cooling Tower stair post repair – Stainless Steel Caps (Deficiency No. 12 in Progress)



Figure 18: Boiler Feed Pumps – No issues observed



Figure 19: Condensate Pumps – No issues observed



Figure 20: Turbine Generator No. 2 Lube Oil Skid – No issues observed



Figure 21: Turbine Generator No. 2

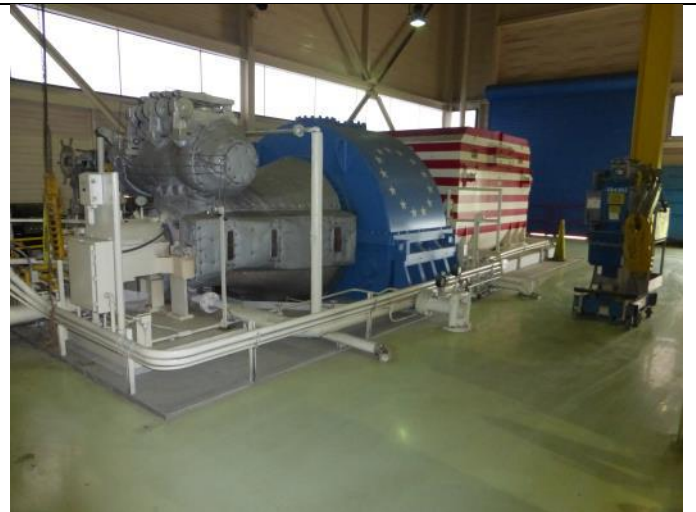


Figure 22: Turbine Generator No. 1



Figure 23: Ferrous Magnet and Pan – Note end section of pan recently replaced



Figure 24: Firing Aisle – No issues observed