



Alexandria/Arlington Resource Recovery Facility
Fiscal Year 2014
Annual Operating Report



July
2014

Table of Contents

<u>Section No.</u>		<u>Page No.</u>
1.0	PURPOSE OF REPORT	4
2.0	EXECUTIVE SUMMARY.....	4
3.0	FACILITY INSPECTION AND RECORDS REVIEW.....	6
4.0	FACILITY PERFORMANCE	8
4.1	Utility and Reagent Consumptions.....	22
4.2	Safety.....	23
5.0	FACILITY MAINTENANCE.....	24
5.1	Availability	24
5.2	Downtime Summary.....	25
5.3	New Loading Dock Construction.....	27
5.4	Facility Housekeeping.....	27
6.0	ENVIRONMENTAL	29
6.1	Nitrogen Oxide Emissions.....	29
6.2	Sulfur Dioxide Emissions	29
6.3	Carbon Monoxide Emissions	29
6.4	Opacity.....	30
6.5	Daily Emissions Data	30
6.6	2014 Annual Stack Testing	30
6.7	Ash System Compliance.....	33
	APPENDIX A FACILITY CEMS DATA.....	35
	APPENDIX B PHOTOS	39

List of Tables

Table No.	Page No.
Table 1: Summary of Audit Report Deficiencies	7
Table 2: Quarterly Performance Summaries.....	15
Table 3: Waste Delivery Classification	16
Table 4: Facility Utility and Reagent Consumptions	22
Table 5: Quarterly Facility Unit Availabilities	25
Table 6: Boiler Downtime – Q4FY14	26
Table 7: Turbine Generator Downtime – Q4FY14	26
Table 8: Facility Housekeeping Ratings – May 2014.....	28
Table 9: Quarterly Environmental Excursions.....	29
Table 10: Stack Test Results through 2014	32
Table 11: Comparison of Statistical Results and Regulatory Thresholds for Metal Analytes	33
Table 12: Unit #1 Monthly Summary for Reportable Emissions Data	36
Table 13: Unit #2 Monthly Summary for Reportable Emissions Data	37
Table 14: Unit #3 Monthly Summary for Reportable Emissions Data	38

List of Charts

Chart No.	Page No.
Chart 1: Tons of Waste Processed.....	8
Chart 2: Tons of Ash Produced per Ton of Waste Processed	9
Chart 3: Ferrous Recovery Rate.....	10
Chart 4: Steam Production.....	11
Chart 5: 12-Month Rolling Steam Production.....	12
Chart 6: Steam Production Rate.....	13
Chart 7: Calculated Waste Heating Value.....	14
Chart 8: Cumulative Total Waste Delivery	17
Chart 9: Gross Electrical Generation.....	17
Chart 10: Gross Conversion Rate	18
Chart 11: Net Conversion Rate.....	19
Chart 12: Net Conversion Rate.....	20
Chart 13: Gross Turbine Generator Conversion Rate	20
Chart 14: Net Turbine Generator Conversion Rate	22
Chart 15: Stack Test Results through 2014	31
Chart 16: Ash Toxicity Characteristic Leaching Procedure (TCLP) Results.....	33
Chart 17: Quarterly Ash Test Results.....	34

List of Figures

Figure No.	Page No.
Figure 1: Fire hose not mounted properly at SDA No. 3 Penthouse Access Door - New Deficiency.....	40
Figure 2: Personal Protective Equipment locker in APC MCC Electrical Room Empty – New Deficiency.....	40
Figure 3: Unused tarp laying over cable trays at Slaker Room No. 1	40
Figure 4: Pothole at Tipping Floor Exit Driveway.....	40
Figure 5: Concrete to roadway drain at truck entrance damaged – exposing reinforcing bar	40
Figure 6: Cooling Tower Deck from SDA Penthouse	40
Figure 7: Deaerator	41
Figure 8: Auxiliary Burner	41
Figure 9: Turbine Generator Enclosure – New Paint Job on Turbine Generator No. 1	41
Figure 10: New Screw Conveyor Troughs	41
Figure 11: Dolomitic Lime Silo	41
Figure 12: SDA No. 2 Double Dump Valve.....	41
Figure 13: Lime Slaker Enclosure	42
Figure 14: Lime Slurry Pump Enclosure.....	42
Figure 15: Ash Load-Out Area.....	42
Figure 16: Ammonia Storage Tank.....	42
Figure 17: New Loading Dock – Construction complete with the exception of permanent safety railings	42
Figure 18: New Loading Dock – Alternate View	42
Figure 19: New Tipping Floor Signs – (Deficiency Item No. 4 – Complete)	43
Figure 20: White Goods Roll-Off	43
Figure 21: Scale House and Scale Area	43
Figure 22: Citizen's Drop-off Roll-off	43
Figure 23: Main Vibratory Ash Conveyor	43
Figure 24: Steam Coil Air Heater.....	43

Definition of Abbreviations & Acronyms

Abbreviation/Acronym

APC
Apr
Aug
Avg
Btu
CAAI
CEMS
CO
Dec
Feb
FMG
FY
gal
GAT
HCl
HDR
ID
Jan
Jul
Jun
klbs
kWhr
lbs
LOA
Mar
Max
May
Min
MSW
MWhr
No
NOV
Nov
NO_x
Oct

OSHA
PDS
ppm
ppmdv
PSD
Q1
Q2
Q3
Q4
RE
RNE
SDA
Sep
SO₂
TCLP

VADEQ
WL
yr
YTD

Definition

Air Pollution Control
April
August
Average
British thermal unit
Covanta Alexandria Arlington, Inc.
Continuous Emissions Monitoring System
Carbon Monoxide
December
February
Facility Monitoring Group
Fiscal Year
Gallon
Guaranteed Annual Tonnage
Hydrochloric (Hydrogen Chlorides)
HDR Engineering Inc
Induced Draft
January
July
June
Kilo-pounds (1,000 lbs)
Kilowatt hours (1,000 watt-hours)
Pounds
Letter of Agreement
March
Maximum
May
Minimum
Municipal Solid Waste
Megawatt hours
Number
Notice of Violation
November
Nitrogen Oxide
October
Occupational Safety and Health
Administration
Potomac Disposal Services
Parts per million
Parts per million dry volume
Prevention of Significant Deterioration
First Quarter
Second Quarter
Third Quarter
Fourth Quarter
Reportable Exempt
Reportable Non-Exempt
Spray Dryer Absorber
September
Sulfur Dioxide
Toxicity Characteristic Leaching Procedure
Virginia Department of Environmental
Quality
Warning Letter
Year
Year to date

Alexandria/Arlington Waste-to-Energy Facility Fiscal Year 2014 Operating Report

1.0 Purpose of Report

HDR Engineering, Inc. (HDR) was given authorization by the Facility Monitoring Group (FMG) to conduct quarterly inspections and provide quarterly monitoring reports regarding the operation and maintenance of the Covanta Alexandria/Arlington Waste-to-Energy Facility (Facility) for the 2014 calendar year. This report is prepared for the fourth quarter of the 2014 fiscal year and summarizes Facility operations between April 1, 2014 and June 30, 2014, as well as the entire fiscal year. This report identifies the fiscal year beginning on July 1, 2013 as FY14 and the quarter beginning on April 1, 2014 as Q4FY14.

This report is based upon the experience HDR has 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 Q4FY14. 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 Q4FY14, the Facility experienced four (4) instances of unscheduled downtime for the boilers totaling 70.6 hours, and no unscheduled downtime for the turbine generators. No scheduled maintenance was conducted during the quarter. The boilers experienced five (5) instances of standby time totaling 95.3 hours, and the turbine generators experienced two (2) instances of standby time totaling 2.5 hours during the quarter. A detailed listing of downtime is provided in Section 5.2 of this report.

Average waste processed during the quarter was 1,041.0 tons per day, or 106.8% of nominal facility capacity. Waste deliveries averaged 1,043.8 tons per day, which is 0.3% higher than the burn rate. The capacity utilization of 106.8% compares favorably to industry averages, which are generally in the 88% to 92% range.

On an annual basis, average waste processed was 956.5 tons per day, or 98.1% of nominal facility capacity of 975 tons per day. Waste deliveries averaged 958.8 tons per day, which is 0.2% 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 decreased 1.0% from the corresponding quarter in FY13; steam production decreased 2.5%, and electricity generated (gross) decreased 4.4% from the corresponding quarter in FY13. The decrease in steam generation was largely attributable to the decrease (3.0%) in the calculated average waste heating value, as well as more (17.8 additional hours) unscheduled and standby downtime experienced by the boilers. The decrease in gross electrical generation in Q4FY14 as compared to Q4FY13 is attributable to the decrease in steam production.

During FY14, MSW processed increased 0.4% from FY13; steam production decreased 2.9%, and electricity generated (gross) decreased 2.9% compared to FY13. The decrease in steam generation was attributable to the decrease (4.4%) in the calculated average waste heating value, as well as more (291.8 additional hours) scheduled, unscheduled, and standby downtime experienced by the boilers. The decrease in gross electrical generation in FY14 as compared to FY13 is attributable to the decrease in steam production, as well as more

(238.4 additional hours) scheduled, unscheduled, and standby downtime experienced by the turbine generators.

3.0 Facility Inspection and Records Review

In May 2014, HDR met with the Facility management and other plant personnel to discuss Facility operations and maintenance, acquire Facility 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 visit, HDR reviewed CAAI records, discussed performance issues with CAAI staff, and provided a verbal report and performance statistics. 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 audit 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.

Table 1: Summary of Audit 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.	Audit Report Deficiencies	Issue Reported	Priority*	Resolution/Status	Date Resolved	Open / Closed
1	Spider cracking at scale entry area	July 2010	C	Repair		Open
2	Pothole at truck entry roadway	May 2012	C	Repair		Open
3	Fire extinguisher certification throughout the Facility expired - Typical of All	February 2014	A	Inspect and re-certify fire extinguishers throughout the Facility	May 2014	Closed
4	Danger sign on column at pit edge damaged	February 2014	A	Replace danger signs at Tipping Floor Pit Edge	May 2014	Closed
5	Fire hose not mounted properly at SDA No. 3 Penthouse Access Door - See Figure 1 (Appendix B)	May 2014	A	Properly stow fire hose		Open
6	Personal Protective Equipment locker in APC MCC Electrical Room Empty – See Figure 2 (Appendix B)	May 2014	A	Stock PPE Locker with proper equipment		Open
7	Unused tarp laying over cable trays at Slaker Room No. 1 – See Figure 3 (Appendix B)	May 2014	A	Remove tarp		Open
8	Pothole at Tipping Floor Exit Driveway– See Figure 4 (Appendix B)	May 2014	C	Repair pothole		Open
9	Concrete to roadway drain at truck entrance damaged – exposing reinforcing bar – See Figure 5 (Appendix B)	May 2014	C	Repair damaged concrete		Open

4.0 Facility Performance

Monthly operating data provided by CAAI indicates that 94,734 tons of MSW were processed during Q4FY14, and a total of 94,988 tons of MSW including 514 tons of Special Handling Waste were received. Total ash production during the quarter was 19,035 tons, which represents 20.1% of the waste processed. The average uncorrected steam production rate for Q4FY14 was 2.9 tons_{steam}/ton_{waste}, which is 1.5% less than the corresponding quarter in FY13. The decrease in this metric is attributable to the decrease (3.0%) in the calculated average waste heating value that was experienced during the quarter, as compared to the corresponding quarter in FY13.

On an annual basis, 349,118 tons of MSW were processed during FY14, and a total of 349,946 tons of MSW and 3,549 tons of Special Handling Waste were received. Total ash production during FY14 was 72,071 tons, which represents 20.6% of the waste processed. The average uncorrected steam production rate for FY14 was 3.0 tons_{steam}/ton_{waste}, and 3.3% lower than the corresponding period last year. The decrease in this metric is attributable to the decrease (4.4%) in the calculated average waste heating value that was experienced in FY14, as compared to FY13.

Chart 1: Tons of Waste Processed

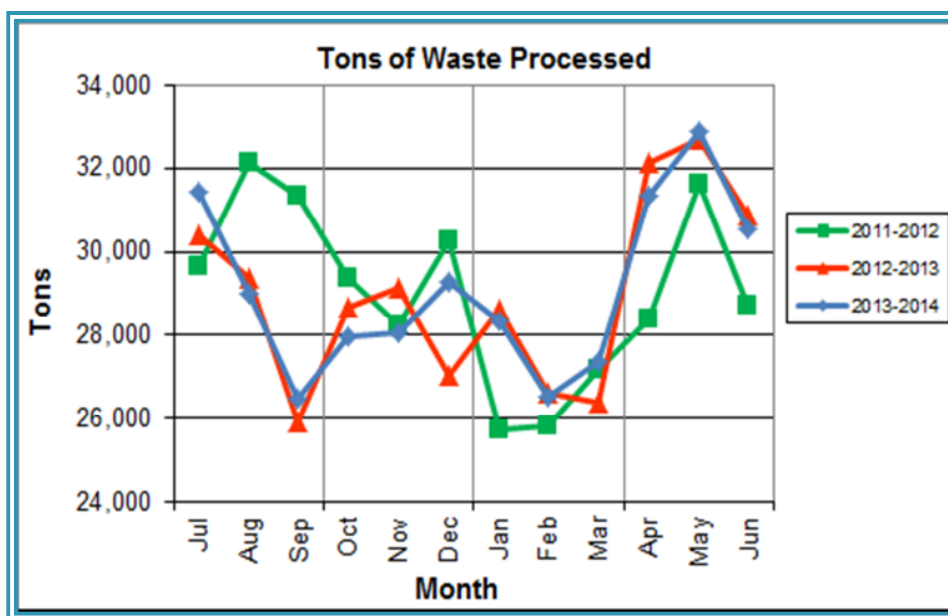


Chart 1 illustrates that Q4FY14 waste processed was slightly lower (1.0%) than the corresponding quarter, Q4FY13.

CAAI reported that 447 tipping floor/MSW internal inspections were conducted during the quarter and CAAI issued one (1) notice of violation (NOV) in May for jumping in line and leaving trash on the exit ramp. No NOV's were issued in April or June 2014.

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

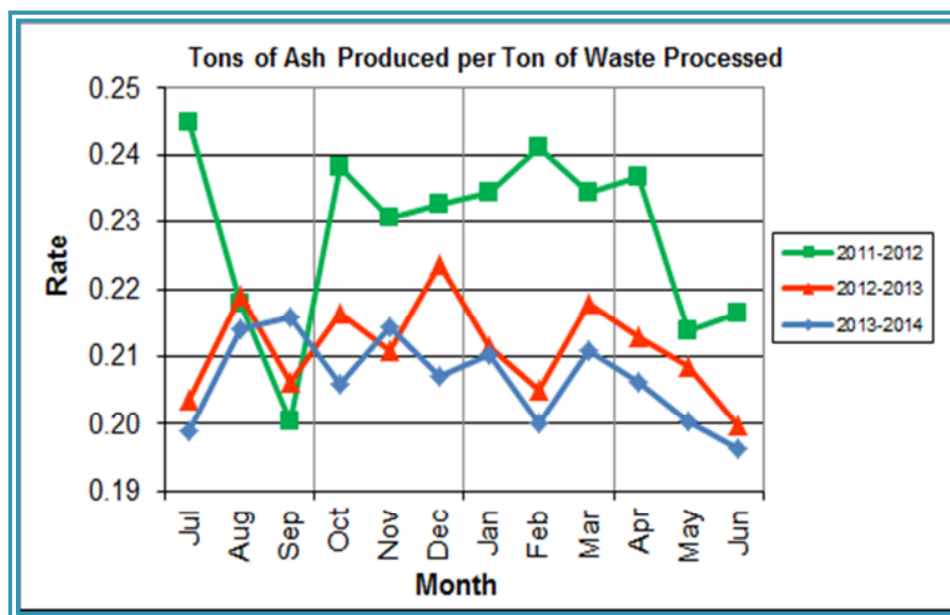


Chart 2 illustrates that ash production rates in Q4FY14 are lower (3.0%) at 20.1% of processed waste, compared to the corresponding quarter in FY13 when the ash production rate was 20.7% of processed waste. The decrease in the quarterly ash is attributable to the significant increase (14.2%) in ferrous metal recovery.

The annual ash production rate for FY14 was lower (2.3%) at 20.6% of processed waste, compared to FY13 when the annual ash production rate was 21.1% of processed waste. The decrease in ash production (20.0% - 21.0% Range), which began in May 2012 is attributed to the installation of the “semi-dry” ash discharger spray system, and represents less moisture in the ash residue

shipped to disposal. Another contributing factor is the aforementioned increase in ferrous metal recovery. CAAI installed a new ferrous magnet shell during the latter part of the fall outage season in December 2013 and ferrous metal recovery has been significantly higher in recent months as a result.

Chart 3: Ferrous Recovery Rate

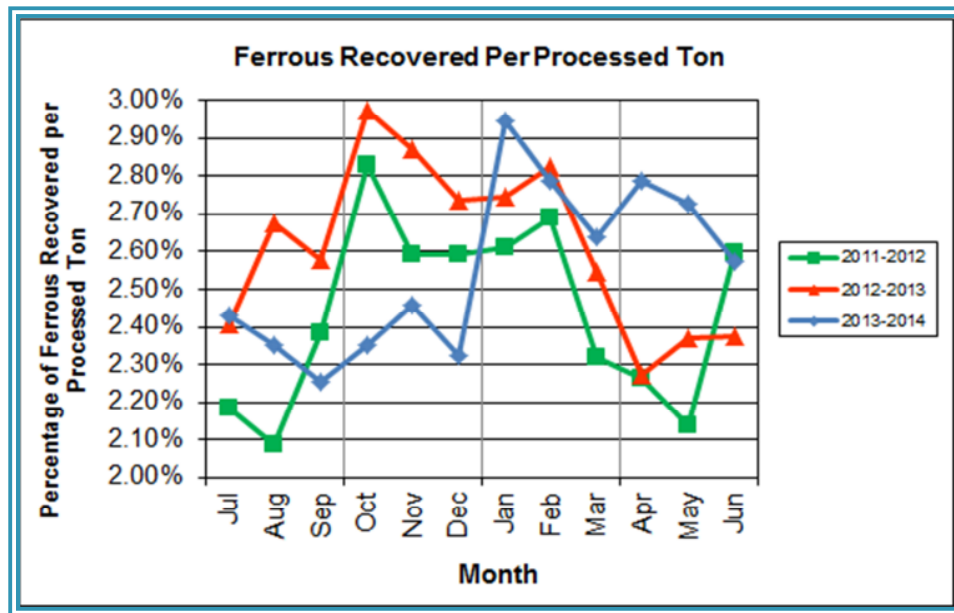
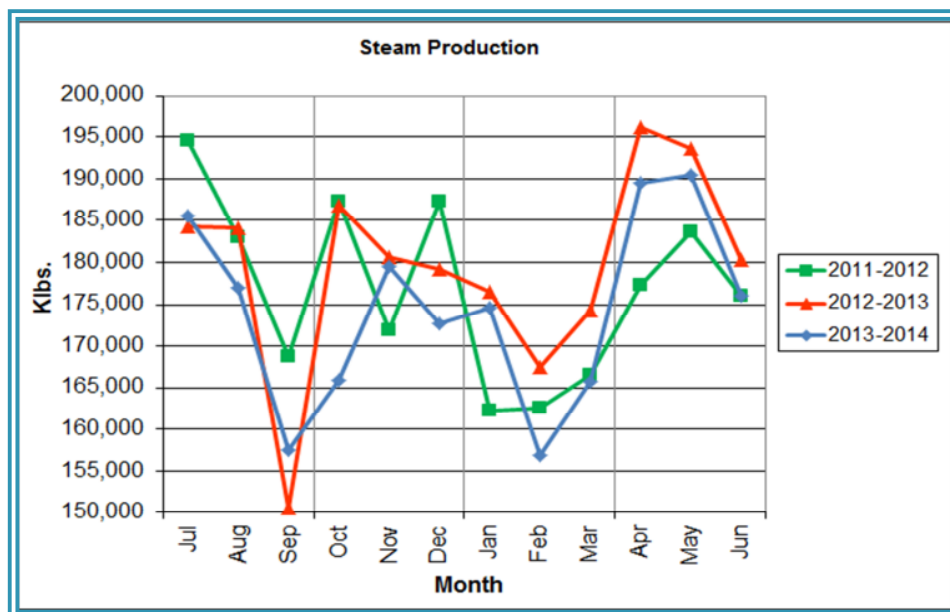


Chart 3 depicts the monthly ferrous metal recovery rate as a percentage of processed MSW tonnage. In Q4FY14, 2,556 tons of ferrous metals were recovered, which is 14.2% higher than the corresponding quarter in FY13 and equivalent to 2.7% of processed waste. The increase in ferrous metal recovery is attributable to the recently installed ferrous magnet shell, which was replaced during an outage in December 2013.

In FY14, 8,922 tons of ferrous metals were recovered, which is 1.6% lower than FY13 and equivalent to 2.6% of processed waste. As depicted in Chart 3, the second half of FY14 had an increased ferrous recovery rate as a result of the new magnet shell installation, which offset the first half of the year which was lower than the prior two fiscal years.

Chart 4: Steam Production



In Chart 4, the total steam production for Q4FY14 was 555,969 klbs., or 2.5% lower than the corresponding quarter in FY13. The decrease in steam production is attributable to the lower (3.0%) calculated average waste heating value during the quarter.

Annual steam production for FY14 was 2,091,123 klbs., or 2.9% lower than FY13 which produced 2,154,201 klbs. The decrease in annual steam production can be attributed to a decrease (4.4%) in waste heating value, as well as an increase in downtime experienced by the boilers in FY14 (1,677.1 total hours) as compared to FY13 (1,385.3 total hours).

Chart 5: 12-Month Rolling Steam Production

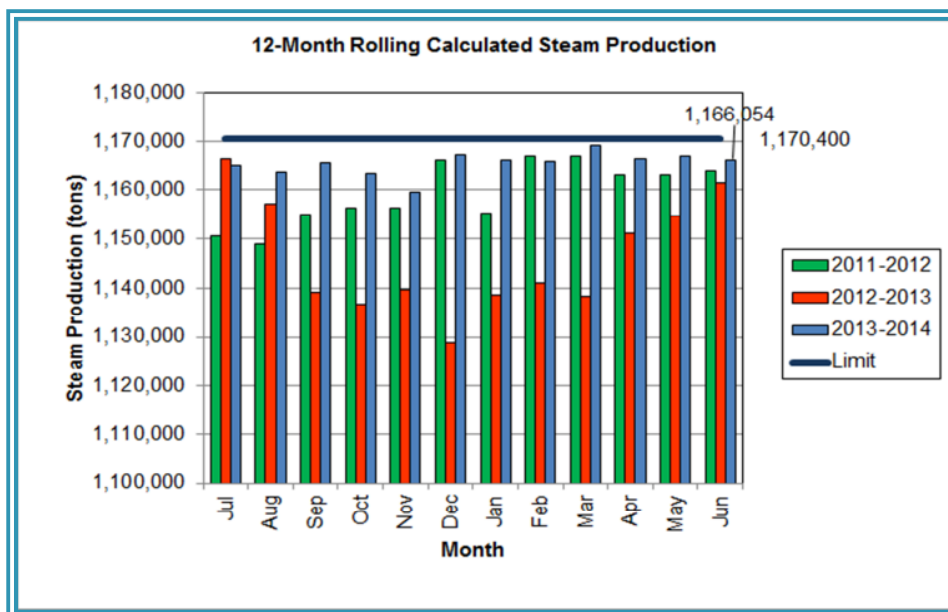
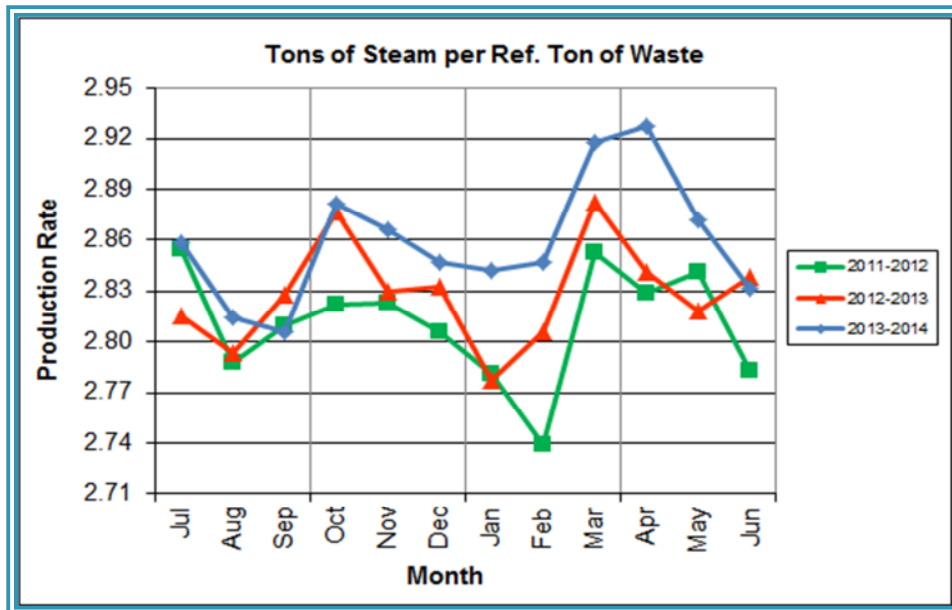


Chart 5 depicts the 12-month rolling steam production total for the period ending in June 2014. According to the Title V permit, the annual steam production for the Facility shall not exceed 1,170,400 tons on the basis of an average value of 3.34 lbs of steam per lb of MSW processed, calculated monthly 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 the quarter. The 12-month rolling total for steam production ending in June 2014 was 1,166,054 tons which is 99.6% of the limit.

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 Q4FY14 this metric tracked higher (1.6%), at 2.9 tons_{steam}/ton_{ref}, than the corresponding quarter in FY13.

The annual steam production rate for FY14 was 2.9 tons_{steam}/ton_{ref}, which is higher (1.1%) than FY13. The small magnitude of the year to year and quarter to quarter changes in this parameter is not significant, but rather indicates consistent performance.

Chart 7: Calculated Waste Heating Value

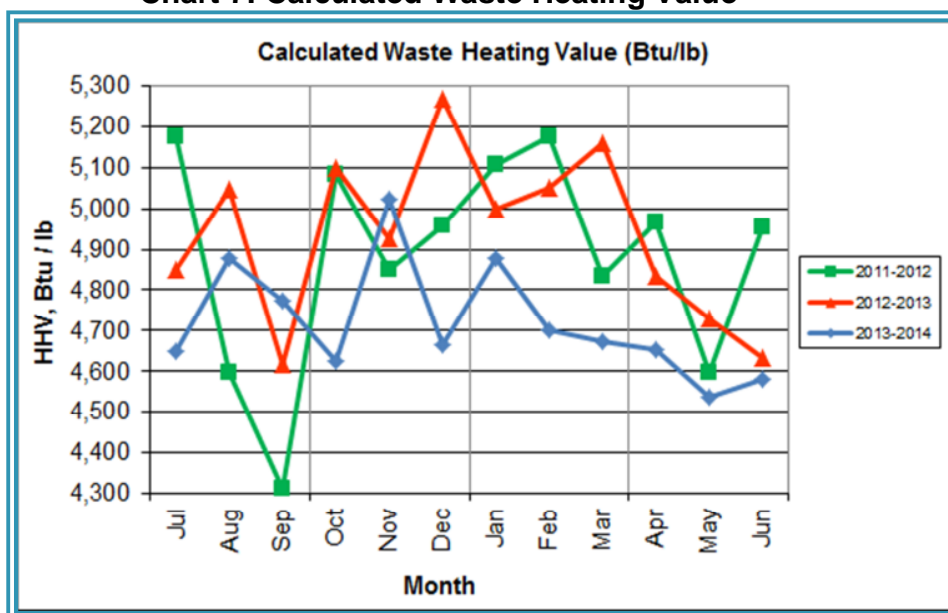


Chart 7 illustrates that Q4FY14 calculated average waste heating value was lower (3.0%) at 4,590 Btu/lb than the corresponding quarter Q4FY13, which averaged 4,733 Btu/lb.

In FY14, the annual average waste heating value was lower (4.4%) at 4,720 Btu/lb than FY13, which averaged 4,935 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)
Q4FY12	Quarterly Totals	88,744	0	19,705	182	2,064	537,001	38,503
	April-12	28,383	0	6,721	23	642	177,252	12,845
	May-12	31,623	0	6,762	68	676	183,629	12,961
	June-12	28,738	0	6,222	91	746	176,120	12,697
Q4FY13	Quarterly Totals	95,680	0	19,826	955	2,238	570,212	41,391
	April-13	32,147	0	6,844	403	731	196,219	14,536
	May-13	32,682	0	6,817	281	775	193,668	14,186
	June-13	30,851	0	6,165	271	732	180,325	12,669
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
FY14 Totals		349,118	0	72,071	3,549	8,922	2,099,974	143,064
FY13 Totals		347,790	0	73,446	2,665	9,063	2,154,201	148,366
FY12 Totals		348,455	0	79,424	336	8,474	2,121,209	149,919

Table 2 presents the production data provided to HDR by CAAI for Q4FY14 on both a monthly and quarterly basis. For purposes of comparison, data for Q4FY12 and Q4FY13 are also shown, as well as FY12, FY13 and FY14 totals.

In comparing quarterly totals, the data shows:

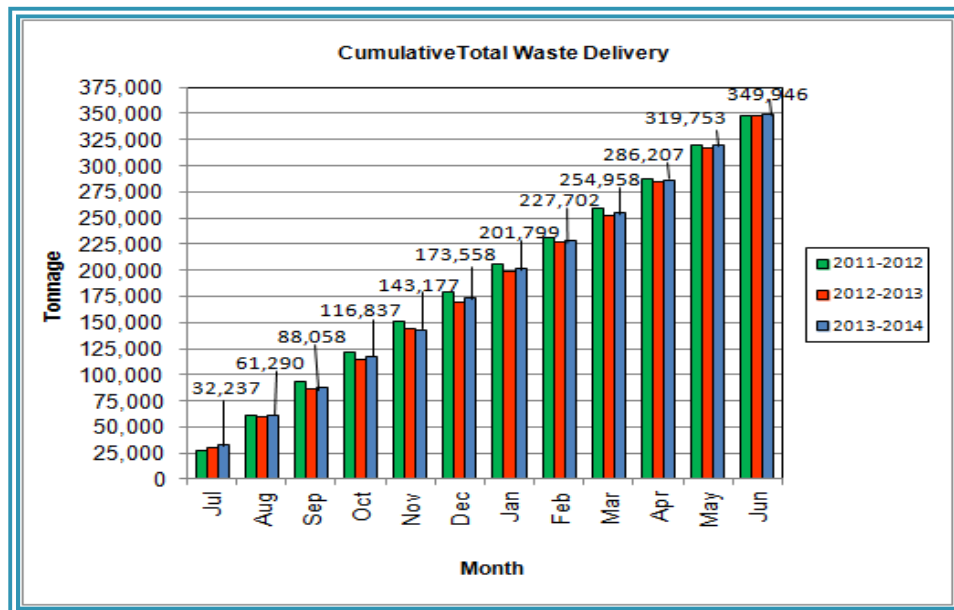
- Less waste was processed in Q4FY14 than Q4FY13 and more than Q4FY12
- Less steam was generated in Q4FY14 than Q4FY13 and more than Q4FY12
- Less electricity was generated in Q4FY14 than Q4FY13 and more than Q4FY12
- Less supplemental waste was received in Q4FY14 than Q4FY13 and significantly more than Q4FY12.

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 Q4FY14 and FY14 continues to be limited by the steam production permit restrictions (refer to Chart 5).

Table 3: Waste Delivery Classification

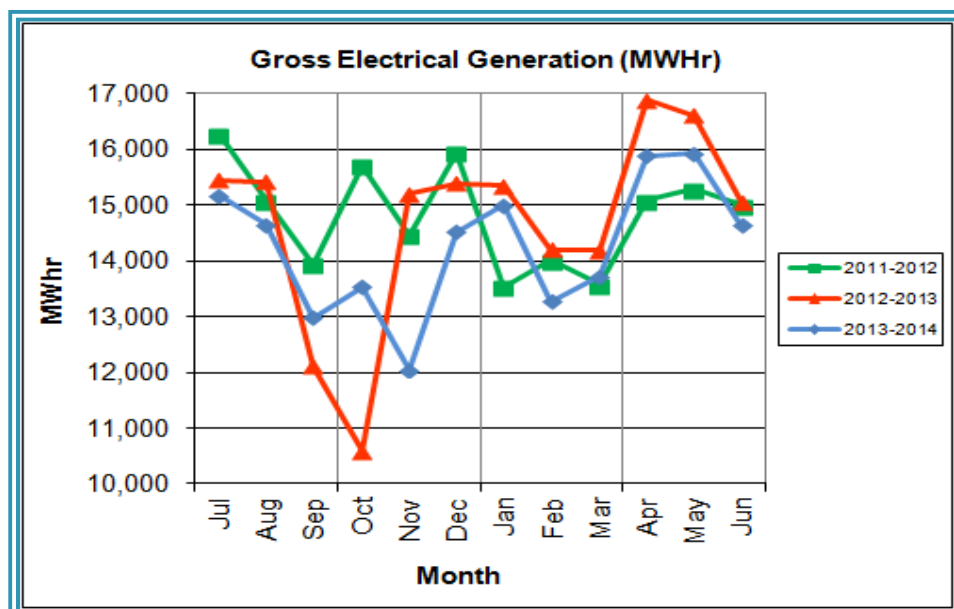
		Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Totals	% of Total
FY11	Jurisdiction Waste	18,201	19,320	18,100	18,244	17,812	17,394	16,316	15,212	18,279	18,596	20,355	19,382	217,213	62.20%
	Spot Waste tons	13,996	13,917	11,696	9,336	10,177	11,441	12,968	7,016	8,459	10,177	12,947	9,657	131,786	37.74%
	Supplemental Waste	8	17	12	13	6	13	14	34	25	29	26	6	203	0.06%
	MSW Totals	32,205	33,254	29,808	27,593	27,995	28,848	29,298	22,262	26,763	28,803	33,328	29,044	349,202	100.00%
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%
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 2014; cumulative total waste delivery was 0.6% more compared to the same period in FY13.

Chart 9: Gross Electrical Generation

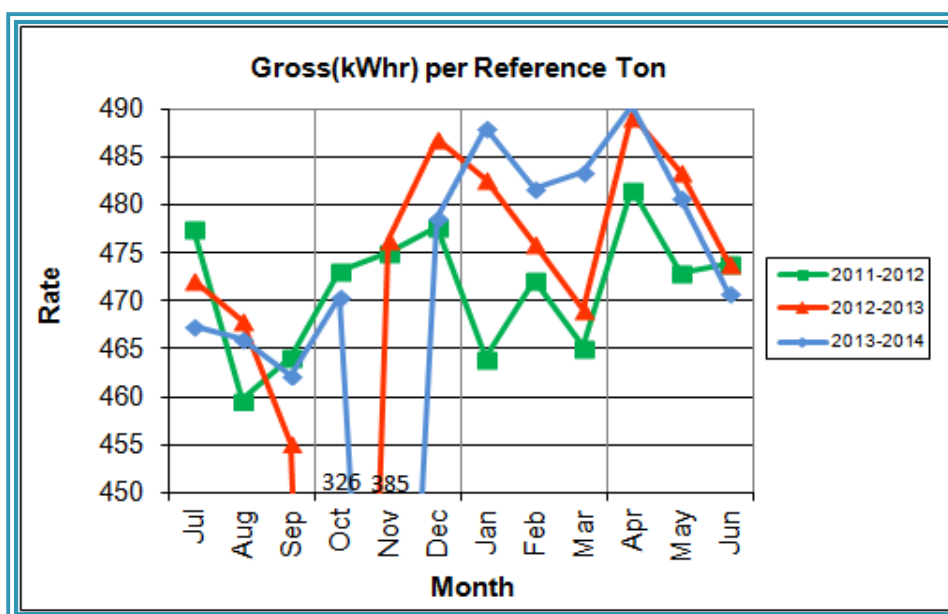


During Q4FY14, the Facility generated 46,444 MWhrs (gross) of electricity compared to Q4FY13 generation of 48,557 MWhrs (gross), a 4.4% decrease. The decrease in gross electrical production is attributable to the decrease (2.5%)

in steam production as a result of lower waste heating value and increase boiler downtime.

During FY14, the Facility generated 171,320 MWhrs (gross) of electricity compared to the FY13 generation of 176,467, a 2.9% decrease. The decrease in gross electrical generation for FY14 is attributable to increased turbine generator downtime which totaled 1,677.1 hours (scheduled, unscheduled and standby), as compared to the 1,385.3 hours (scheduled, unscheduled and standby) experienced in FY13. Note that the 3-year low of gross electrical production experienced in October 2012 was due to Turbine Generator No. 1 experiencing 494.5 hours of downtime for scheduled maintenance and again in October 2013 when Turbine Generator No. 2 had a major overhaul. Evidence of the downtime experienced by the Turbine Generators is also apparent in Chart Nos. 10 through 14, including sharp spikes in the trends for the months of October 2012 and 2013 as well as November 2013 when the Overhauls were conducted on Turbine Generator Nos. 1 and 2.

Chart 10: Gross Conversion Rate



As shown in Chart 10, the average gross electrical generation per reference ton of refuse processed during Q4FY14 was 481 kWhr, which is 0.3% lower than the

corresponding quarter in FY13. Since this calculated value uses reference or normalized tonnages of waste, it should cancel the effect of MSW heating value (Btu content) variability.

During FY14, the average gross electrical generation per reference ton of refuse processed was 469 kWhr, which is higher (1.2%) than FY13.

Chart 11: Net Conversion Rate

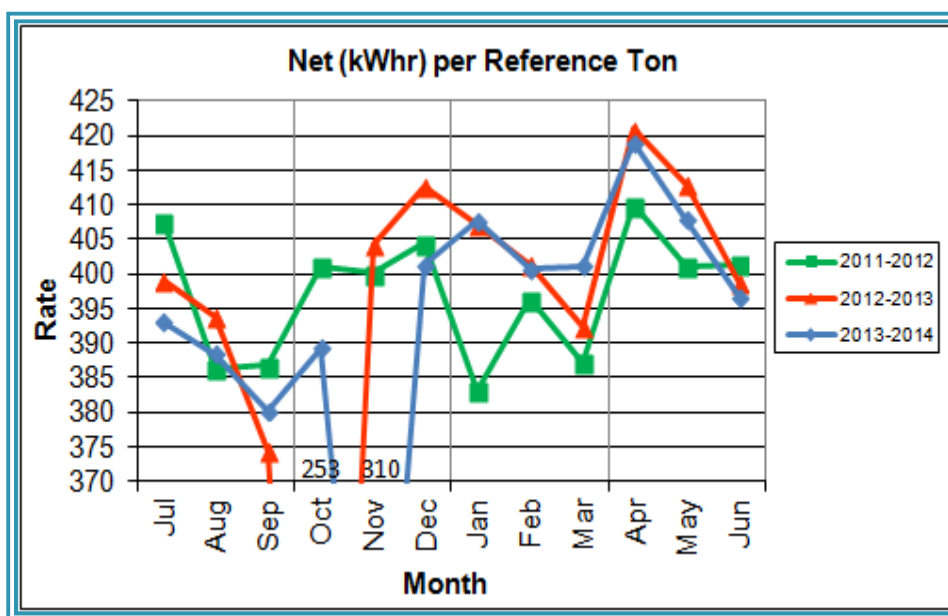


Chart 11 depicts the normalized net power (gross minus in-house usage) generation history. In Q4FY14, the average net electrical generation per reference ton was 408 kWhr, which is 0.8% lower than the corresponding quarter in FY13.

In FY14, the average net electrical generation per reference ton was 391 kWhr, which is 0.5% higher than FY13.

Chart 12: Net Conversion Rate

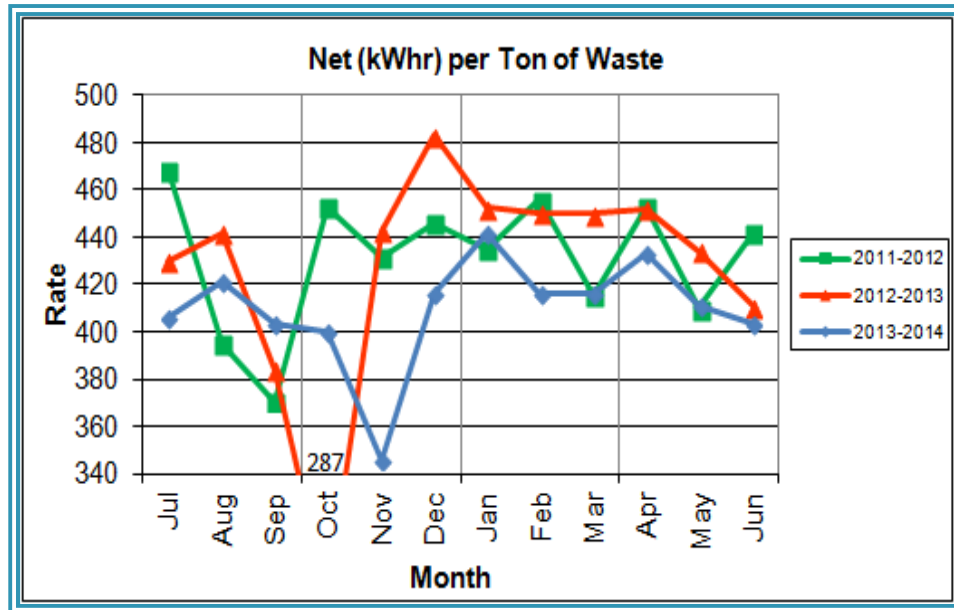
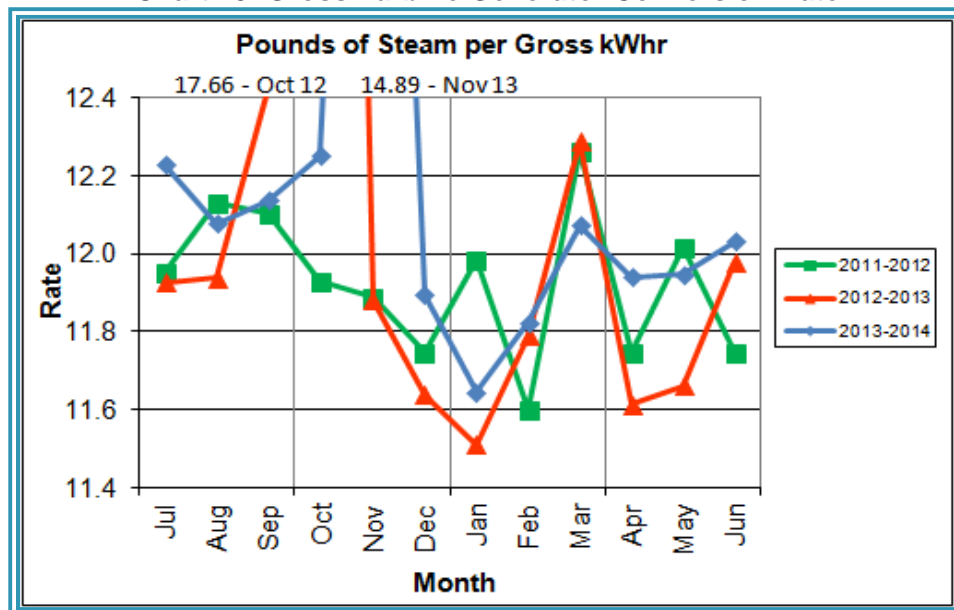


Chart 12 depicts the net power generation per processed ton. The net electrical generation per processed ton in Q4FY14 was 416 kWhr, which is 3.8% lower than the corresponding quarter in FY13.

In FY14, the net electrical generation per processed ton was 410 kWhr which is 4.0% lower than FY13.

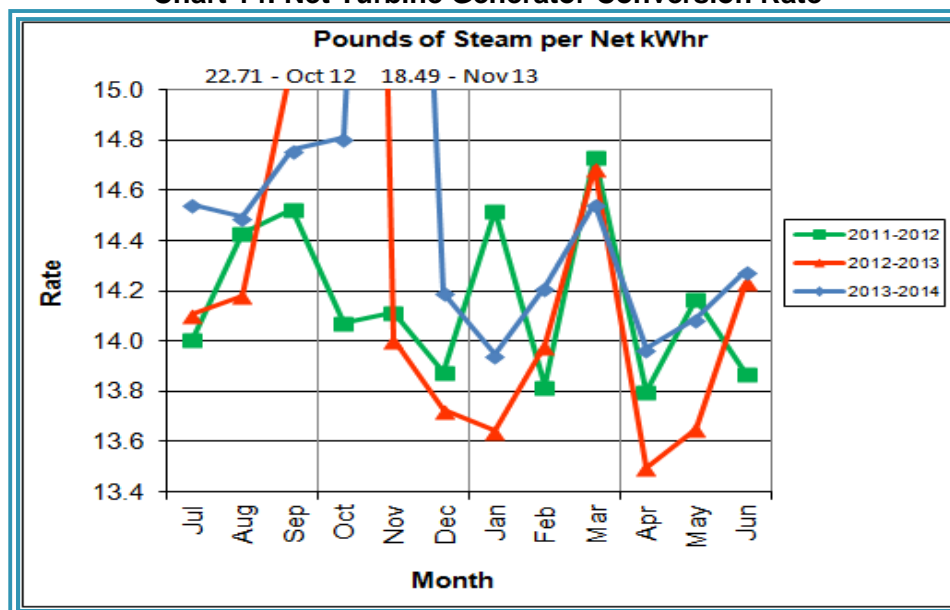
Chart 13: Gross Turbine Generator Conversion Rate



Charts 13 and 14 illustrate the quantities of steam required to generate one 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 Q4FY14 the average lbs of steam consumed per gross kWhr was 12.0, which is higher (1.9%) than the corresponding quarter Q4FY13. The average lbs of steam consumed per net kWhr was 14.1, which is higher (2.4%) than the corresponding quarter in FY13. The average steam temperature during the quarter was 681.4° F, which is 2.6% lower than the average steam temperature of the corresponding quarter last year, and 18.6° F lower than design temperature of 700° F.

In FY14, the average lbs of steam consumed per gross kWhr was 12.2, which is identical to FY13. The average lbs of steam consumed per net kWhr in FY14 was 14.6, which is 0.7% higher than FY13. The average steam temperature for FY14 was 681.6° F, which is 1.2% lower than FY13 and 18.4° F lower than the design temperature of 700° F. It is noted that steam consumption per kWhr, both gross and net, are adversely affected by the very high levels associated with the aforementioned Turbine Generator No. 1 major overhaul in September/October 2012, and Turbine Generator No. 2 in November 2013. CAAI reported that during the Turbine Generator No. 2 overhaul, 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 indicated that a new set of blades will be manufactured and installed during a Turbine Generator No. 2 Outage in 2016. As a result of the blank stage, turbine generator performance (Chart Nos. 13 and 14) didn't improve to the level which would normally be expected following turbine generator major overhauls.

Chart 14: Net Turbine Generator Conversion Rate



4.1 Utility and Reagent Consumptions

Table 4: Facility Utility and Reagent Consumptions

Utility	Units	Q4FY14 Total	Q4FY13 Total	Q4FY14"Per Processed Ton" Consumption	Q4FY13"Per Processed Ton" Consumption	FY14 Total	FY13 Total
Purchased Power	MWhr	5,409	5,467	0.06	0.06	22,724	21,925
Fuel Oil	Gal.	13,340	13,450	0.14	0.14	54,350	50,890
Boiler Make-up	Gal.	2,352,000	2,080,000	24.83	21.74	8,629,000	7,540,000
Cooling Tower Make-up	Gal.	38,098,539	39,745,929	402.16	415.40	131,237,906	154,786,310
Pebble Lime	Lbs.	1,336,000	1,280,000	14.10	13.38	5,090,000	4,946,000
Ammonia	Lbs.	181,000	148,000	1.91	1.55	648,000	562,000
Carbon	Lbs.	106,000	106,000	1.12	1.11	406,000	410,000
Dolomitic Lime	Lbs.	244,000	238,000	2.58	2.49	1,084,000	896,000

Fuel oil usage during the quarter represents approximately 0.22% of the total heat input to the boilers, which compares favorably with industry averages, and is identical to the percentage of heat input in Q4FY13. 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 3.5% of steam flow, and is acceptable. Pebble lime usage, at 1,336,000 lbs. is higher

(4.4%) than the corresponding quarter last year, and the quarterly consumption rate of 14.1 lbs/ton is below historical levels (16-18 lbs/ton).

In comparing Q4FY14 to Q4FY13 on a per processed ton consumption basis:

- the purchased power consumption rate was 0.1% lower
- the total fuel oil consumption rate was 0.2% higher
- the boiler make-up water consumption rate was 14.2% higher
- the cooling tower make-up water consumption rate was 3.2% lower
- the total pebble lime consumption rate was 5.4% higher
- the ammonia consumption rate was 23.5% higher
- the carbon consumption rate was 1.0% higher
- the total dolomitic lime consumption rate was 3.5% higher

CAAI reports that the significant increase in ammonia consumption rate is attributable partly to spring yard waste increases, along with a controller issue with the ammonia injection system on one of the units.

4.2 **Safety**

The Facility had no recordable accidents during the quarter and has operated 1,320 days without an OSHA recordable incident through the end of June 2014. Safety training was conducted during the quarter with themes as follows:

April 2014 – Machine Guarding/Environmental Awareness II

May 2014 – Respiratory Protection/ Heavy Metals, and Air Quality Control Upsets

June 2014 – Summer Safety and Heat Stress, Compressed Gases, Flammable Liquids, Emergency Action Plan, and Startup/Shut down/Malfunction

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.

No scheduled maintenance was conducted during Q4FY14. CAAI reports that 2,351 preventative maintenance actions were completed during the quarter.

5.1 Availability

Facility availabilities for Q4FY14 are shown in Table 5. According to CAAI reports, the average unit availabilities for Boiler Nos. 1, 2, and 3 for Q4FY14 were 99.2%, 98.3%, and 99.3%, respectively. The three-boiler average availability during the quarter was 98.9%, which is good.

During Q4FY14, the average availability for Turbine Generator Nos. 1 and 2 was 100.0%, which is excellent. Note that the reported unit availability percentages exclude standby time.

Overall boiler availability for FY14 was 96.5%, and overall turbine generator availability was 96.3%. 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 741.6 hours for the boilers and 565.7 hours for the turbine generators. Annual turbine-generator availability was negatively impacted by the Turbine Generator No. 2 overhaul.

Table 5: Quarterly Facility Unit Availabilities

Availability	Q1FY14 Average	Q2FY14 Average	Q3FY14 Average	Q4FY14 Average	FY14 Average
Boiler No. 1	100.0%	95.3%	93.7%	99.2%	97.1%
Boiler No. 2	93.5%	100.0%	93.8%	98.3%	96.4%
Boiler No. 3	95.9%	95.5%	93.4%	99.3%	96.0%
Avg.	96.5%	96.9%	93.6%	98.9%	96.5%
Turbine No. 1	99.9%	99.3%	100.0%	100.0%	99.8%
Turbine No. 2	100.0%	71.3%	99.6%	100.0%	92.7%
Avg.	100.0%	85.3%	99.8%	100.0%	96.3%

5.2 Downtime Summary

During Q4FY14, the Facility experienced four (4) instances of unscheduled downtime for the boilers totaling 70.6 hours, and no unscheduled downtime for the turbine generators. No scheduled maintenance was conducted during the quarter. The boilers experienced five (5) instances of standby time totaling 95.3 hours, and the turbine generators experienced two (2) instances of standby time totaling 2.5 hours during the quarter. Details of downtime events experienced during the quarter are portrayed in Tables 6 and 7:

Table 6: Boiler Downtime – Q4FY14

Boiler Number	Outage Begin Date	Outage End Date	Hours Unavailable	Downtime Classification	Reason Unavailable
2	4/17/14	4/17/14	18.0	Unscheduled	Repair of a waterwall tube leak
1	5/5/14	5/5/14	1.0	Standby	Preventative measure taken to avoid exceeding 350,000 ton rolling 12-month process limit
2	5/5/14	5/6/14	18.6	Unscheduled	Replacement of Under Fire Air Fan Motor and gas pass cleaning
1	5/14/14	5/15/14	24.7	Standby	Preventative measure taken to avoid exceeding 350,000 ton rolling 12-month process limit
3	6/4/14	6/4/14	16.0	Unscheduled	Repair of an external tube leak
3	6/5/14	6/5/14	8.0	Standby	Preventative measure taken to avoid exceeding 350,000 ton rolling 12-month process limit
1	6/6/14	6/8/14	38.3	Standby	Preventative measure taken to avoid exceeding 350,000 ton rolling 12-month process limit
2	6/26/14	6/27/14	23.3	Standby	Preventative measure taken to avoid exceeding 350,000 ton rolling 12-month process limit
1	6/29/14	6/30/14	18.0	Unscheduled	Repair of an external tube leak
Total Unscheduled Downtime			70.6 Hours		
Total Scheduled Downtime			0.0 Hours		
Total Standby Downtime			95.3 Hours		
Total Downtime			165.9 Hours		

Table 7: Turbine Generator Downtime – Q4FY14

Turbine Generator Number	Outage Begin Date	Outage End Date	Hours Unavailable	Downtime Classification	Reason Unavailable
1	5/5/14	5/5/14	1.0	Standby	Boiler No. 2 Under Fire Air Fan Motor upset and Feeder Breaker Trip
2	5/5/14	5/5/14	1.5	Standby	Boiler No. 2 Under Fire Air Fan Motor upset and Feeder Breaker Trip
Total Unscheduled Downtime					0.0 Hours
Total Scheduled Downtime					0.0 Hours
Total Standby Downtime					2.5 Hours
Total Downtime					2.5 Hours

5.3 **New Loading Dock Construction**

During the February 2014 site visit, HDR observed the ongoing construction of a new loading dock parallel to the Tipping Floor entrance. During the May 2014 site visit, HDR observed that the loading dock had been completed with the exception of the installation of a hand/safety railing. CAAI reports that the new loading dock will be used for supplemental waste deliveries, and potentially for other deliveries that currently slow traffic entering the Tipping Floor. Updated photos of the completed loading dock are shown in Appendix B (Figure Nos. 17 and 18).

5.4 **Facility Housekeeping**

CAAI is performing Facility housekeeping and maintaining plant cleanliness in accordance with acceptable industry practices. A site inspection was conducted in May 2014. 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 May 2014 inspection are presented in Table 8.

Table 8: Facility Housekeeping Ratings – May 2014

Facility Area	Highly Acceptable	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 retrofit 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 Q4FY14 are summarized in Appendix A. The Facility experienced no environmental exceedances during the quarter. All environmental exceedances experienced during FY14 are summarized in Table 9 as follows:

Table 9: Quarterly Environmental Excursions

Date	Excursion	Exempt
7/14/13	Boiler No. 3 4-hour CO levels reached 469 ppm (100 ppm limit)	Yes
9/8/13	Boiler No. 2 6-minute Opacity Average reached 12% (10% limit)	Yes
9/9/13	Boiler No. 2 4-hour CO levels reached 220 ppm (100 ppm limit)	Yes
12/13/13	Boiler No. 2 4-hour CO levels reached 169 ppm (100 ppm limit)	No

6.1 Nitrogen Oxide Emissions

During Q4FY14, the monthly emission concentrations of nitrogen oxides (NO_x) averaged 168.0 ppmdv, 160.7 ppmdv and 161.3 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 Q4FY14 the monthly emission concentration of stack sulfur dioxide (SO₂) averaged 1.3 ppmdv, 0.3 ppmdv, and 1.0 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 Q4FY14, the average CO emission concentrations on Boiler Nos. 1, 2, and 3 were 37.0 ppmdv, 37.0 ppmdv, and 30.0 ppmdv, respectively, and all are well within permit limits (100 ppmdv, hourly average).

6.4 **Opacity**

During Q4FY14, the average opacity for Boiler Nos. 1, 2, and 3 was 0.7%, 0.1%, and 0.0% respectively. All of these averages are significantly below the 10% (6-minute) average permit limit.

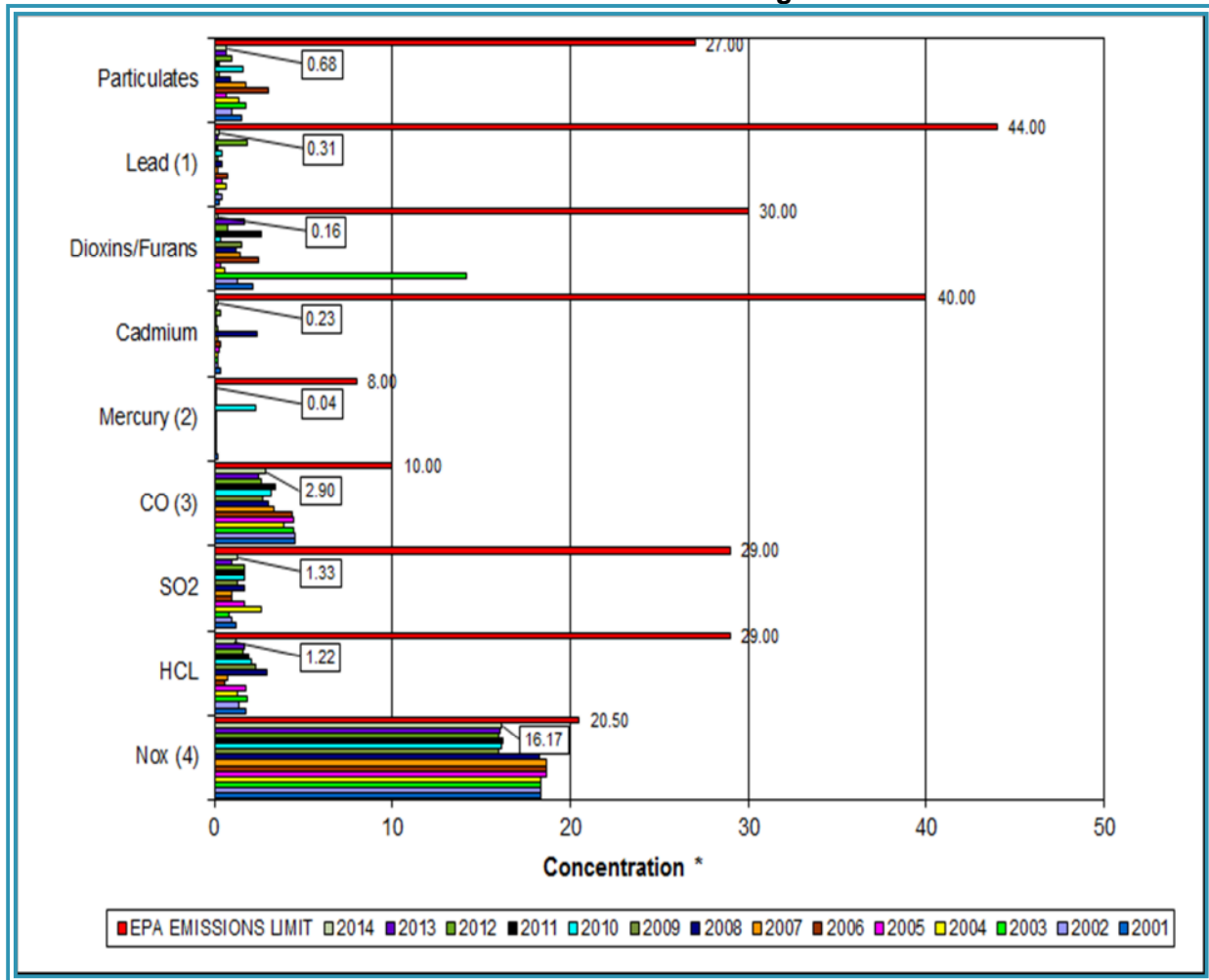
6.5 **Daily Emissions Data**

Appendix A, Tables 12, 13, and 14 tabulate the monthly average, maximum, and minimum emissions data for each unit during Q4FY14. 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 **2014 Annual Stack Testing**

Annual stack testing was conducted March 24th through March 27th, 2014 by Testar Inc. Ten years of stack test data including 2014 results are summarized in Chart 15 and Table 10. The 2014 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 2014 were 0.004 Gr/DSCF (grains per dry standard cubic foot) corrected to 7% O₂, compared to the 2013 Annual Stack Testing PM <2.5 Results which averaged 0.005 Gr/DSCF corrected to 7% O₂. It is noted that the 2014 dioxin/furan emissions of 0.16 ng/dscm are amongst the lowest values of this parameter for municipal waste combustors that HDR is aware of.

Chart 15: Stack Test Results through 2014



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 10: Stack Test Results through 2014

		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)
2004	Boiler 1	184	1.55	6	38	0.35	0.21		2.57	0.965	--
	Boiler 2	181	1.23	1	49	1.56	0.247	0.578	13.0	1.80	--
	Boiler 3	185	1.16	1	31	1.96	0.144		3.46	1.41	--
	AVERAGE	183.33	1.31	2.67	39.33	1.29	0.20	0.58	6.34	1.39	--
2005	Boiler 1	187	1.86	2	47	0.4	0.40	0.382	6.8	0.5	--
	Boiler 2	186	1.83	1	48	0.4	0.2		4.9	0.8	--
	Boiler 3	188	1.68	2	39	0.4	0.2		1.9	0.7	--
	AVERAGE	187.00	1.79	1.67	44.67	0.40	0.27	0.38	4.53	0.67	--
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
EPA EMISSIONS LIMIT		205	29	29	100	80	40	30	440	27	--
Percent of Limit for 2014		78.9%	4.2%	4.6%	29.0%	0.5%	0.6%	0.5%	0.7%	2.5%	--

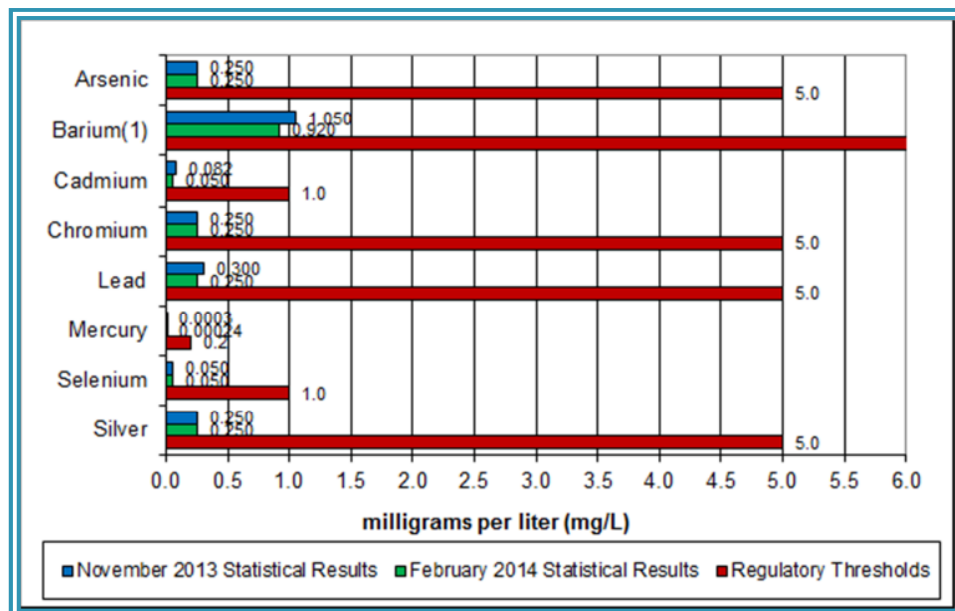
6.7 Ash System Compliance

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 4 to 9 lbs per ton. Ash Toxicity (TCLP) tests were performed for field samples collected over a seven (7) day period in February 2014, and results indicate that the average pH during testing was 10.3. Results from the TCLP testing conducted in February 2014 are depicted in Table 11 and Chart 16 below.

Table 11: Comparison of Statistical Results and Regulatory Thresholds for Metal Analytes

Metals	90% Upper Confidence (February 2014)	90% Upper Confidence (November 2013)	Regulatory Threshold (mg/L)	% of Threshold (February 2014)	% of Threshold (November 2013)
Arsenic	0.250	0.250	5.0	5.00%	5.00%
Barium	0.920	1.050	100.0	0.92%	1.05%
Cadmium	0.050	0.082	1.0	5.00%	8.20%
Chromium	0.250	0.250	5.0	5.00%	5.00%
Lead	0.250	0.300	5.0	5.00%	6.00%
Mercury	0.00024	0.0003	0.2	0.12%	0.15%
Selenium	0.050	0.050	1.0	5.00%	5.00%
Silver	0.250	0.250	5.0	5.00%	5.00%

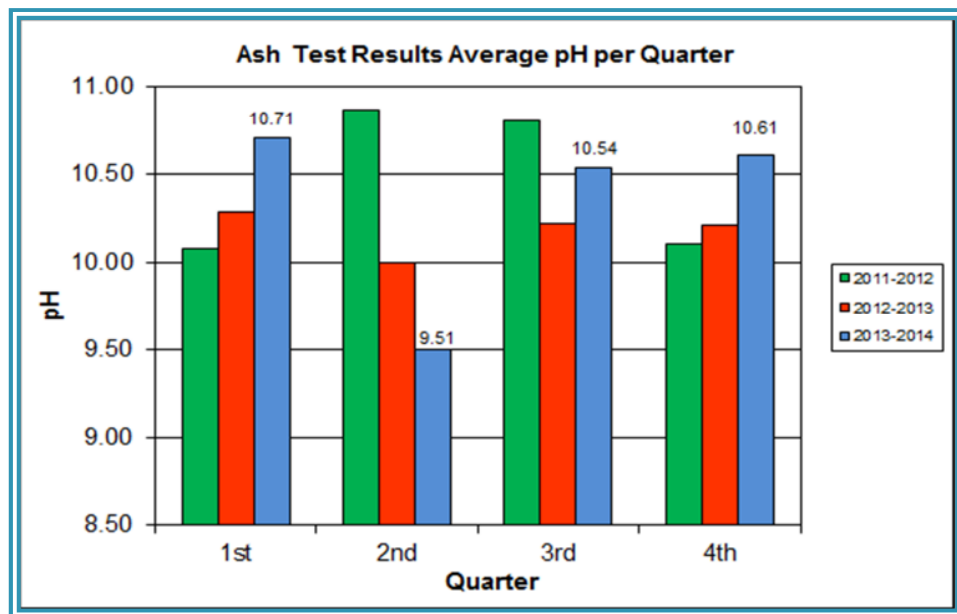
Chart 16: Ash Toxicity Characteristic Leaching Procedure (TCLP) Results



Note: The regulatory threshold for Barium is 100 mg/L

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 17 where each quarter is represented by the average of the respective monthly readings. During Q4FY14, the average ash pH for in-house tests was 10.6.

Chart 17: Quarterly Ash Test Results



APPENDIX A FACILITY CEMS DATA

Table 12: 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-14	AVG	85.0	35.0	2.0	35.0	169.0	0.6	302.0	16.3	3.0
	Max	88.0	46.0	4.0	43.0	187.0	1.5	303.0	17.0	3.3
	Min	80.1	18.0	0.0	29.0	164.0	0.2	301.0	16.1	2.4
May-14	AVG	84.0	32.0	1.0	42.0	168.0	0.9	302.0	16.3	3.0
	Max	89.1	51.0	4.0	251.0	184.0	2.9	303.0	16.7	3.3
	Min	70.6	14.0	0.0	26.0	160.0	0.1	300.0	16.1	2.8
Jun-14	AVG	84.1	31.0	1.0	34.0	167.0	0.5	302.0	16.6	3.0
	Max	87.0	53.0	4.0	41.0	182.0	0.9	304.0	19.5	3.2
	Min	79.2	23.0	0.0	28.0	161.0	0.2	301.0	16.2	2.7
Quarter Average		84.4	32.7	1.3	37.0	168.0	0.7	302.0	16.4	3.0
Quarter Max Value		89.1	53.0	4.0	251.0	187.0	2.9	304.0	19.5	3.3
Quarter Min Value		70.6	14.0	0.0	26.0	160.0	0.1	300.0	16.1	2.4
Limits:		NA	NA	29	100	205	10	320	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 (ie., 4-hour block averages for CO) do not correlate with the 24 hour average data reported above.

Table 13: 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.		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-14	AVG	90.4	54.0	1.0	36.0	161.0	0.3	297.0	16.3	2.9
	Max	93.3	72.0	3.0	45.0	179.0	1.7	297.0	17.2	3.2
	Min	83.7	43.0	0.0	27.0	151.0	0.0	295.0	16.0	2.2
May-14	AVG	89.3	42.0	0.0	40.0	162.0	0.0	297.0	16.3	2.9
	Max	92.3	59.0	2.0	49.0	177.0	0.3	298.0	17.7	3.0
	Min	71.7	29.0	0.0	22.0	158.0	0.0	297.0	16.0	2.7
Jun-14	AVG	85.7	34.0	0.0	35.0	159.0	0.0	297.0	16.2	2.8
	Max	91.1	50.0	2.0	40.0	165.0	0.2	298.0	16.3	3.0
	Min	78.1	25.0	0.0	29.0	155.0	0.0	296.0	16.0	2.7
Quarter Average		88.5	43.3	0.3	37.0	160.7	0.1	297.0	16.3	2.9
Quarter Max Value		93.3	72.0	3.0	49.0	179.0	1.7	298.0	17.7	3.2
Quarter Min Value		71.7	25.0	0.0	22.0	151.0	0.0	295.0	16.0	2.2
Limits:		NA	NA	29	100	205	10	320	17(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 (ie., 4-hour block averages for CO) do not correlate with the 24 hour average data reported above.

Table 14: 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.		SteamFI	SO ₂ ec	SO ₂ sc	COsc	NO _x sc	Opacity	FF InTemp	Carblnj	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-14	AVG	91.7	48.0	1.0	26.0	162.0	0.0	303.0	16.1	3.2
	Max	93.6	59.0	3.0	34.0	179.0	0.3	303.0	16.3	3.8
	Min	83.6	36.0	0.0	19.0	158.0	0.0	302.0	16.0	2.4
May-14	AVG	89.0	35.0	1.0	35.0	162.0	0.0	302.0	16.2	3.1
	Max	92.3	55.0	4.0	91.0	171.0	0.3	304.0	16.6	3.5
	Min	71.6	25.0	0.0	17.0	159.0	0.0	301.0	16.1	2.9
Jun-14	AVG	88.7	33.0	1.0	29.0	160.0	0.0	303.0	16.2	3.1
	Max	92.2	55.0	2.0	39.0	167.0	0.0	304.0	16.6	3.2
	Min	84.0	23.0	0.0	20.0	158.0	0.0	302.0	16.0	2.9
Quarter Average		89.8	38.7	1.0	30.0	161.3	0.0	302.7	16.2	3.1
Quarter Max Value		93.6	59.0	4.0	91.0	179.0	0.3	304.0	16.6	3.8
Quarter Min Value		71.6	23.0	0.0	17.0	158.0	0.0	301.0	16.0	2.4
Limits:		NA	NA	29	100	205	10	320	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 (ie., 4-hour block averages for CO) do not correlate with the 24 hour average data reported above.

APPENDIX B

SITE PHOTOS – May 2014



Figure 1: Fire hose not mounted properly at SDA No. 3 Penthouse Access Door - New Deficiency



Figure 2: Personal Protective Equipment locker in APC MCC Electrical Room Empty - New Deficiency



Figure 3: Unused tarp laying over cable trays at Slaker Room No. 1



Figure 4: Pothole at Tipping Floor Exit Driveway



Figure 5: Concrete to roadway drain at truck entrance damaged - exposing reinforcing bar

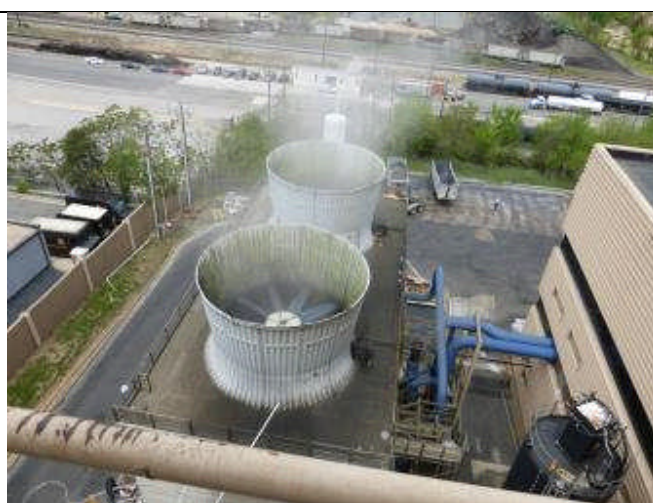


Figure 6: Cooling Tower Deck from SDA Penthouse



Figure 7: Deaerator



Figure 8: Auxiliary Burner



Figure 9: Turbine Generator Enclosure – New Paint Job on Turbine Generator No. 1

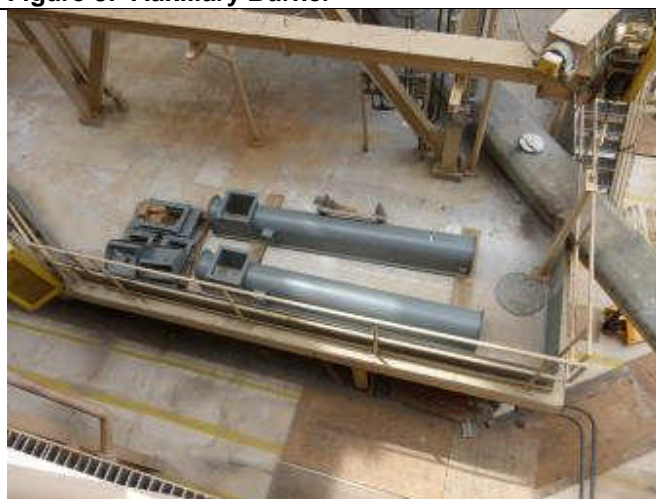


Figure 10: New Screw Conveyor Troughs



Figure 11: Dolomitic Lime Silo



Figure 12: SDA No. 2 Double Dump Valve



Figure 13: Lime Slaker Enclosure

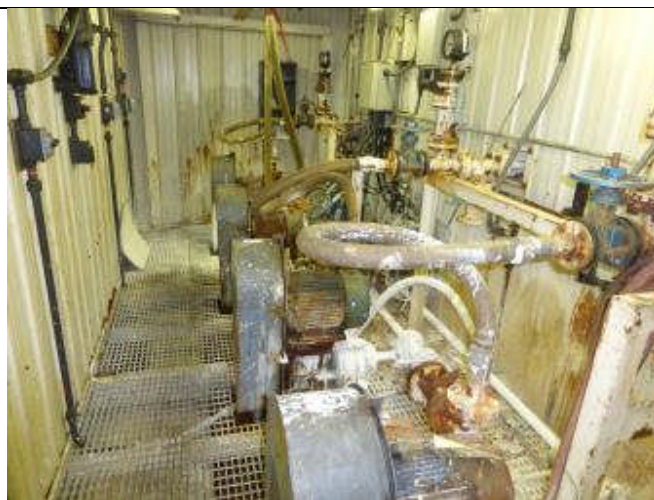


Figure 14: Lime Slurry Pump Enclosure



Figure 15: Ash Load-Out Area



Figure 16: Ammonia Storage Tank



Figure 17: New Loading Dock – Construction complete with the exception of permanent safety railings

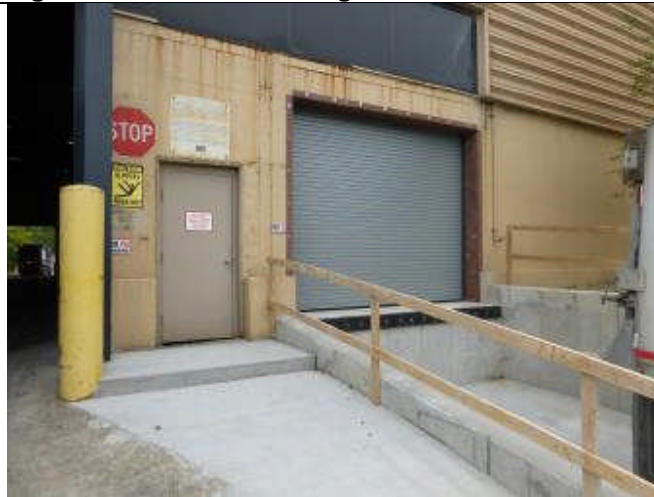


Figure 18: New Loading Dock – Alternate View



Figure 19: New Tipping Floor Signs – (Deficiency Item No. 4 – Complete)



Figure 20: Metal Roll-Off



Figure 21: Scale House and Scale Area

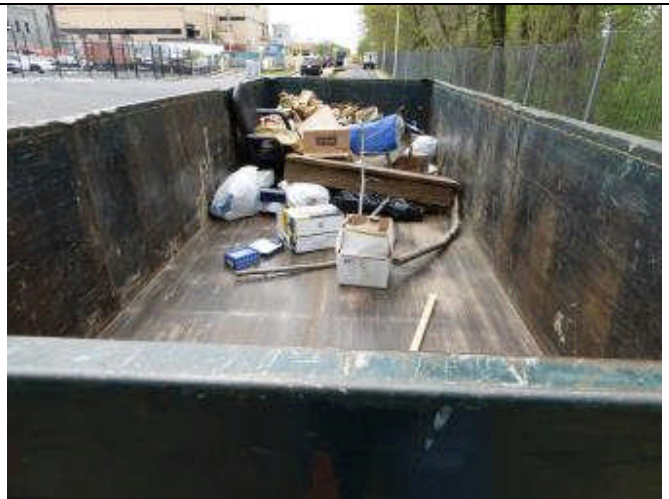


Figure 22: Citizen's Drop-off Roll-off



Figure 23: Main Vibratory Ash Conveyor



Figure 24: Steam Coil Air Heater