

October 31, 2016

*Via Electronic Mail*

Marc A. Lovallo  
Environmental Specialist  
Compliance Assurance, Northeast District  
Florida Dept of Environmental Protection  
7777 Baymeadows Way W, Suite 100  
Jacksonville, FL 32256

Re: **Gainesville Renewable Energy Center, LLC (GREC)**  
**Air Permit No. 0010131-006-AV (PSD-FL-411)**  
**ORIS: 57241**  
**Q3 2016 Excess Emission Reports**

Dear Mr. Lovallo:

Below please find a summary of our 3<sup>rd</sup> Quarter 2016 excess emission reports:

<u>Report</u>	<u>Duration/Comment</u>
NOx lb/mmBtu 30-day Summary	Compliant
CO lb/mmBtu 30-day Summary	Compliant
NOX & CO lb/mmBtu Excess Emissions	19 hours
SO2 lb/mmBtu 24-hr Summary	Compliant
Opacity 6 minute Summary	Compliant
NOX, SO2 TPY 12-Month Rolling	Compliant
NOX lb/MW hr 30 day Summary	Compliant
SO2 lb/MW hr 30 day Summary	Compliant
Steam Flow Production Summary	Compliant

The detailed reports are attached for your review. If you have any questions or require additional information, please contact the Plant Engineer, Ali Leaphart, at (386) 315-8019 or me at (617) 904-3100, ext. 122.

I certify, based on information and belief formed after reasonable inquiry, the statements and information in this report are true, accurate, and complete.

Sincerely,



Leonard J. Fagan  
Vice President of Engineering  
GREC Asset Manager

LJF/cw  
enclosures

**Continuous Emission Monitor Quarterly Report Summary**  
**Gaseous and Opacity Excess Emission and Monitoring System Performance**

Pollutant: NOx lb/MMBtu 30 Day EPA Report

Emission Limitation: 0.070

Analyzer Make/Model: CAI 600

Analyzer Serial Number: Y08012

Reporting Period Dates: From 07/01/2016 to 09/30/2016 23:59:59

Company Name: Gainesville

Address: 11201 NW 13th Street  
 Gainesville, FL 32653

Process Unit Description: Biomass Boiler

Date of Last CEMS Certification or Audit: 11/6/2014

Total Source Operating Time in Reporting Period: 39 Hours

**CMS Performance Summary**

1. CEMS downtime in reporting period due to:	Duration	% Unavailable <sup>1</sup>
1. Monitor Equipment Malfunctions	0	0.00 %
2. Non-Monitor CEMS Equipment Malfunctions	0	0.00 %
3. Calibration/QA	0	0.00 %
4. Other Known Causes	0	0.00 %
5. Unknown Causes	0	0.00 %
<b>2. Total CEMS Downtime</b>	<b>0</b>	<b>0.00 % <sup>2</sup></b>

% Unavailable = CEMS Downtime during Source Operating Time/Source Operating Time x 100

**Emission Data Summary**

1. Duration of excess emissions in reporting period due to:	Duration	% Excess Emissions <sup>1</sup>
1. Startup/Shutdown	0	0.00 %
2. Control Equipment Problems	0	0.00 %
3. Process Problems	0	0.00 %
4. Other Known Causes	0	0.00 %
5. Unknown Causes	0	0.00 %
6. Unit Offline	0	0.00 %
<b>2. Total duration of excess emissions.....</b>	<b>0</b>	<b>0.00 % <sup>2</sup></b>

% Excess Emissions = Total Duration of Excess Emissions/Source Operating Time x 100

<sup>1</sup> For opacity, record all times in minutes. For gases, record all times in hours.

<sup>2</sup> For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in §60.7(c) shall be submitted.

**Continuous Emission Monitor Quarterly Report Summary**  
**Gaseous and Opacity Excess Emission and Monitoring System Performance**

Pollutant: CO lb/MMBtu 30 Day EPA Report

Emission Limitation: 0.080

Analyzer Make/Model: CAI 601

Analyzer Serial Number: Z01007

Reporting Period Dates: From 07/01/2016 to 09/30/2016 23:59:59

Company Name: Gainesville

Address: 11201 NW 13th Street  
 Gainesville, FL 32653

Process Unit Description: Biomass Boiler

Date of Last CEMS Certification or Audit: 11/6/2014

Total Source Operating Time in Reporting Period: 39 Hours

**CMS Performance Summary**

1. CEMS downtime in reporting period due to:	Duration	% Unavailable <sup>1</sup>
1. Monitor Equipment Malfunctions	0	0.00 %
2. Non-Monitor CEMS Equipment Malfunctions	0	0.00 %
3. Calibration/QA	0	0.00 %
4. Other Known Causes	0	0.00 %
5. Unknown Causes	0	0.00 %
<b>2. Total CEMS Downtime</b>	<b>0</b>	<b>0.00 % <sup>2</sup></b>

% Unavailable = CEMS Downtime during Source Operating Time/Source Operating Time x 100

**Emission Data Summary**

1. Duration of excess emissions in reporting period due to:	Duration	% Excess Emissions <sup>1</sup>
1. Startup/Shutdown	0	0.00 %
2. Control Equipment Problems	0	0.00 %
3. Process Problems	0	0.00 %
4. Other Known Causes	0	0.00 %
5. Unknown Causes	0	0.00 %
6. Unit Offline	0	0.00 %
<b>2. Total duration of excess emissions.....</b>	<b>0</b>	<b>0.00 % <sup>2</sup></b>

% Excess Emissions = Total Duration of Excess Emissions/Source Operating Time x 100

<sup>1</sup> For opacity, record all times in minutes. For gases, record all times in hours.

<sup>2</sup> For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in §60.7(c) shall be submitted.

**NOx & CO lb/MMBtu Excess Emissions – 3<sup>rd</sup> Quarter, 2016**

Startup/Shutdown Exclusions:

	<u>CO Hourly</u>	<u>NOX Hourly</u>	<u>Description</u>	<u>Corrective Action</u>
9/29	0900 – 1.39 1000 – 0.923 1100 – 0.932 1200 – 1.196 1400 – 0.794 1500 – 0.67 1600 – 0.715 1700 – 0.44 1800 – 0.309 1900 – 0.344 2000 – 0.405 2100 – 0.322 2200 – 0.091 2300 – 0.319 0000 – 0.362 0100 - 0.248 0200 - 0.285 0300 - 0.136 0400 – 0500 – 0.101	7 Hours Common 0.138 0.269 0.232 0.23 0.221 0.23 0.213 0.122	Cold Startup	Permit Condition: B.13.a
9/30	19	8		
<b>Total</b>	<b>19</b>			

Malfunction:

	<u>CO Hourly</u>	<u>NOX Hourly</u>	<u>Description</u>	<u>Corrective Action</u>
9/30	0700 – 0.242 0800 – 0.223		Boiler Trip	Permit Condition: Appendix CEMS 19.a Fuel Blending
<b>Total</b>	<b>2</b>			

**NOx & CO lb/MMBtu Excess Emissions – 3<sup>rd</sup> Quarter, 2016**

Total Quarterly Excluded Hours = 21

Total 12-month Rolling Excluded Hours, Ending 3<sup>rd</sup> Quarter = 92

**Continuous Emission Monitor Quarterly Report Summary**  
**Gaseous and Opacity Excess Emission and Monitoring System Performance**

Pollutant: SO2 lb/MMBtu 24 Hour EPA Report

Emission Limitation: 0.029

Analyzer Make/Model: CAI 600

Analyzer Serial Number: Z01006

Reporting Period Dates: From 07/01/2016 to 09/30/2016 23:59:59

Company Name: Gainesville

Address: 11201 NW 13th Street  
 Gainesville, FL 32653

Process Unit Description: Biomass Boiler

Date of Last CEMS Certification or Audit: 11/6/2014

Total Source Operating Time in Reporting Period: 39 Hours

**CMS Performance Summary**

1. CEMS downtime in reporting period due to:	Duration	% Unavailable <sup>1</sup>
1. Monitor Equipment Malfunctions	0	0.00 %
2. Non-Monitor CEMS Equipment Malfunctions	0	0.00 %
3. Calibration/QA	3	7.69 %
4. Other Known Causes	0	0.00 %
5. Unknown Causes	0	0.00 %
<b>2. Total CEMS Downtime</b>	<b>3</b>	<b>7.69 % <sup>2</sup></b>

% Unavailable = CEMS Downtime during Source Operating Time/Source Operating Time x 100

**Emission Data Summary**

1. Duration of excess emissions in reporting period due to:	Duration	% Excess Emissions <sup>1</sup>
1. Startup/Shutdown	0	0.00 %
2. Control Equipment Problems	0	0.00 %
3. Process Problems	0	0.00 %
4. Other Known Causes	0	0.00 %
5. Unknown Causes	0	0.00 %
6. Unit Offline	0	0.00 %
<b>2. Total duration of excess emissions.....</b>	<b>0</b>	<b>0.00 % <sup>2</sup></b>

% Excess Emissions = Total Duration of Excess Emissions/Source Operating Time x 100

<sup>1</sup> For opacity, record all times in minutes. For gases, record all times in hours.

<sup>2</sup> For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in §60.7(c) shall be submitted.



**Continuous Emission Monitor Quarterly Report Summary**  
**Gaseous and Opacity Excess Emission and Monitoring System Performance**

Pollutant: Opacity 6 Minute >10/20 EPA Report

Emission Limitation: 10.00

Analyzer Make/Model: DURAG D-R 290

Analyzer Serial Number: 1220055

Reporting Period Dates: From 07/01/2016 to 09/30/2016 23:59:59

Company Name: Gainesville

Address: 11201 NW 13th Street  
 Gainesville, FL 32653

Process Unit Description: Boiler Opacity

Date of Last CEMS Certification or Audit: 11/6/2014

Total Source Operating Periods: 408 Periods

**CMS Performance Summary**

1. CEMS downtime in reporting period due to:	Duration	% Unavailable <sup>1</sup>
1. Monitor Equipment Malfunctions	0	0.00 %
2. Non-Monitor CEMS Equipment Malfunctions	0	0.00 %
3. Calibration/QA	0	0.00 %
4. Other Known Causes	15	3.68 %
5. Unknown Causes	0	0.00 %
<b>2. Total CEMS Downtime</b>	<b>15</b>	<b>3.68 % <sup>2</sup></b>

% Unavailable = CEMS Downtime during Source Operating Periods/Source Operating Periods x 100

**Emission Data Summary**

1. Duration of excess emissions in reporting period due to:	Duration	% Excess Emissions <sup>1</sup>
1. Startup/Shutdown	0	0.00 %
2. Control Equipment Problems	0	0.00 %
3. Process Problems	0	0.00 %
4. Other Known Causes	0	0.00 %
5. Unknown Causes	0	0.00 %
6. Unit Offline	0	0.00 %
<b>2. Total duration of excess emissions.....</b>	<b>0</b>	<b>0.00 % <sup>2</sup></b>

% Excess Emissions = Total Excess Emission Periods/Source Operating Periods x 100

<sup>1</sup> For opacity, record all times in minutes. For gases, record all times in hours.

<sup>2</sup> For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating periods or the total CMS downtime is 5 percent or greater of the total operating periods, both the summary report form and the excess emission report described in §60.7(c) shall be submitted.



**Continuous Emission Monitor Quarterly Report Summary**  
**Gaseous and Opacity Excess Emission and Monitoring System Performance**

Pollutant: Opacity 6 Minute >20/27 EPA Report

Emission Limitation: 20.00

Analyzer Make/Model: DURAG D-R 290

Analyzer Serial Number: 1220055

Reporting Period Dates: From 07/01/2016 to 09/30/2016 23:59:59

Company Name: Gainesville

Address: 11201 NW 13th Street  
 Gainesville, FL 32653

Process Unit Description: Boiler Opacity

Date of Last CEMS Certification or Audit: 11/6/2014

Total Source Operating Periods: 408 Periods

**CMS Performance Summary**

1. CEMS downtime in reporting period due to:	Duration	% Unavailable <sup>1</sup>
1. Monitor Equipment Malfunctions	0	0.00 %
2. Non-Monitor CEMS Equipment Malfunctions	0	0.00 %
3. Calibration/QA	0	0.00 %
4. Other Known Causes	15	3.68 %
5. Unknown Causes	0	0.00 %
<b>2. Total CEMS Downtime</b>	<b>15</b>	<b>3.68 % <sup>2</sup></b>

% Unavailable = CEMS Downtime during Source Operating Periods/Source Operating Periods x 100

**Emission Data Summary**

1. Duration of excess emissions in reporting period due to:	Duration	% Excess Emissions <sup>1</sup>
1. Startup/Shutdown	0	0.00 %
2. Control Equipment Problems	0	0.00 %
3. Process Problems	0	0.00 %
4. Other Known Causes	0	0.00 %
5. Unknown Causes	0	0.00 %
6. Unit Offline	0	0.00 %
<b>2. Total duration of excess emissions.....</b>	<b>0</b>	<b>0.00 % <sup>2</sup></b>

% Excess Emissions = Total Excess Emission Periods/Source Operating Periods x 100

<sup>1</sup> For opacity, record all times in minutes. For gases, record all times in hours.

<sup>2</sup> For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating periods or the total CMS downtime is 5 percent or greater of the total operating periods, both the summary report form and the excess emission report described in §60.7(c) shall be submitted.

# Boiler Opacity 6 Minute Downtime Report

**Facility Name:** Gainesville  
**Source:** Opac  
**Parameter:** OPACITY

**Location:** Gainesville, FL

Data in the Reporting Period: 07/01/2016 00:00 to 09/30/2016 23:59

Incid. No.	Start Date	End Date	Duration Periods	Reason	EPA Downtime Category	Corrective Action
1	07/05/2016 13:24	07/05/2016 13:35	2	Other Known Causes	Other Known Causes	Incomplete Period - Equipment Testing
2	07/19/2016 12:54	07/19/2016 12:59	1	Other Known Causes	Other Known Causes	Incomplete Period - Equipment Testing
3	08/01/2016 12:30	08/01/2016 12:35	1	Other Known Causes	Other Known Causes	Incomplete Period - Equipment Testing
4	08/01/2016 12:42	08/01/2016 12:47	1	Other Known Causes	Other Known Causes	Incomplete Period - Equipment Testing
5	08/16/2016 12:06	08/16/2016 12:17	2	Other Known Causes	Other Known Causes	Incomplete Period - Equipment Testing
6	09/07/2016 12:12	09/07/2016 12:17	1	Other Known Causes	Other Known Causes	Incomplete Period - Equipment Testing
7	09/07/2016 12:24	09/07/2016 12:29	1	Other Known Causes	Other Known Causes	Incomplete Period - Equipment Testing
8	09/19/2016 12:30	09/19/2016 12:35	1	Other Known Causes	Other Known Causes	Incomplete Period - Equipment Testing
9	09/19/2016 12:48	09/19/2016 12:53	1	Other Known Causes	Other Known Causes	Incomplete Period - Equipment Testing
10	09/19/2016 13:12	09/19/2016 13:17	1	Other Known Causes	Other Known Causes	Incomplete Period - Equipment Testing
11	09/29/2016 08:54	09/29/2016 08:59	1	Other Known Causes	Other Known Causes	Incomplete Period - Startup
12	09/30/2016 07:30	09/30/2016 07:35	1	Other Known Causes	Other Known Causes	Incomplete Period - Shutdown
13	09/30/2016 07:42	09/30/2016 07:47	1	Other Known Causes	Other Known Causes	Incomplete Period - Startup

Total Downtime in the Reporting Period = 15 Periods

Data Availability for this Reporting Period = 96.32 %

Total Operating Time in the Reporting Period = 408 Periods

# Monthly & 12-Month Rolling Report

**Company:** Gainesville Renewable Energy Center, LLC

11201 NW 13th Street

Gainesville, FL 32653

**Source:** EU-002

**Data Group:** All Data Groups

**Report Name:** Summary: Monthly and 12-Month Rolling  
Totals

**Start of Report:** 10/1/2015 00:00

**End of Report:** 9/30/2016 23:59

	NOx		SO2		NOx		SO2	
	Tons/month	Tons/month	Tons/month	Tons/month	12-Month Rolling	12-Month Rolling	12-Month Rolling	12-Month Rolling
10/01/2015 00:00	0.00	0.00	0.00	0.00	216.45	0.14	0.14	0.14
11/01/2015 00:00	7.06	0.00	0.00	0.00	196.54	0.14	0.14	0.14
12/01/2015 00:00	0.00	0.00	0.00	0.00	169.53	0.14	0.14	0.14
1/01/2016 00:00	0.00	0.00	0.00	0.00	148.56	0.14	0.14	0.14
2/01/2016 00:00	0.00	0.00	0.00	0.00	125.43	0.14	0.14	0.14
3/01/2016 00:00	1.49	0.00	0.00	0.00	101.95	0.14	0.14	0.14
04/01/2016 00:00	0.00	0.00	0.00	0.00	88.29	0.14	0.14	0.14
05/01/2016 00:00	1.11	0.00	0.00	0.00	69.95	0.14	0.14	0.14
06/01/2016 00:00	0.00	0.00	0.00	0.00	44.74	0.00	0.00	0.00
07/01/2016 00:00	0.00	0.00	0.00	0.00	17.45	0.00	0.00	0.00
08/01/2016 00:00	0.00	0.00	0.00	0.00	11.23	0.00	0.00	0.00
09/01/2016 00:00	1.22	0.00	0.00	0.00	10.91	0.00	0.00	0.00

**Continuous Emission Monitor Quarterly Report Summary**  
**Gaseous and Opacity Excess Emission and Monitoring System Performance**

Pollutant: NOx lb/MW/hr 30 Day EPA Report

Emission Limitation: 1.00

Analyzer Make/Model: CAI 600

Analyzer Serial Number: Y08012

Reporting Period Dates: From 07/01/2016 to 09/30/2016 23:59:59

Company Name: Gainesville

Address: 11201 NW 13th Street  
 Gainesville, FL 32653

Process Unit Description: Biomass Boiler

Date of Last CEMS Certification or Audit: 11/6/2014

Total Source Operating Time in Reporting Period: 39 Hours

**CMS Performance Summary**

1. CEMS downtime in reporting period due to:	Duration	% Unavailable <sup>1</sup>
1. Monitor Equipment Malfunctions	0	0.00 %
2. Non-Monitor CEMS Equipment Malfunctions	0	0.00 %
3. Calibration/QA	0	0.00 %
4. Other Known Causes	0	0.00 %
5. Unknown Causes	0	0.00 %
<b>2. Total CEMS Downtime</b>	<b>0</b>	<b>0.00 % <sup>2</sup></b>

% Unavailable = CEMS Downtime during Source Operating Time/Source Operating Time x 100

**Emission Data Summary**

1. Duration of excess emissions in reporting period due to:	Duration	% Excess Emissions <sup>1</sup>
1. Startup/Shutdown	0	0.00 %
2. Control Equipment Problems	0	0.00 %
3. Process Problems	0	0.00 %
4. Other Known Causes	0	0.00 %
5. Unknown Causes	0	0.00 %
6. Unit Offline	0	0.00 %
<b>2. Total duration of excess emissions.....</b>	<b>0</b>	<b>0.00 % <sup>2</sup></b>

% Excess Emissions = Total Duration of Excess Emissions/Source Operating Time x 100

<sup>1</sup> For opacity, record all times in minutes. For gases, record all times in hours.

<sup>2</sup> For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in §60.7(c) shall be submitted.

**Continuous Emission Monitor Quarterly Report Summary**  
**Gaseous and Opacity Excess Emission and Monitoring System Performance**

Pollutant: SO<sub>2</sub> lb/MW<sub>hr</sub> 30 Day EPA Report

Emission Limitation: 1.40

Analyzer Make/Model: CAI 600

Analyzer Serial Number: Z01006

Reporting Period Dates: From 07/01/2016 to 09/30/2016 23:59:59

Company Name: Gainesville

Address: 11201 NW 13th Street  
 Gainesville, FL 32653

Process Unit Description: Biomass Boiler

Date of Last CEMS Certification or Audit: 11/6/2014

Total Source Operating Time in Reporting Period: 39 Hours

**CMS Performance Summary**

1. CEMS downtime in reporting period due to:	Duration	% Unavailable <sup>1</sup>
1. Monitor Equipment Malfunctions	0	0.00 %
2. Non-Monitor CEMS Equipment Malfunctions	0	0.00 %
3. Calibration/QA	3	7.69 %
4. Other Known Causes	0	0.00 %
5. Unknown Causes	0	0.00 %
<b>2. Total CEMS Downtime</b>	<b>3</b>	<b>7.69 % <sup>2</sup></b>

% Unavailable = CEMS Downtime during Source Operating Time/Source Operating Time x 100

**Emission Data Summary**

1. Duration of excess emissions in reporting period due to:	Duration	% Excess Emissions <sup>1</sup>
1. Startup/Shutdown	0	0.00 %
2. Control Equipment Problems	0	0.00 %
3. Process Problems	0	0.00 %
4. Other Known Causes	0	0.00 %
5. Unknown Causes	0	0.00 %
6. Unit Offline	0	0.00 %
<b>2. Total duration of excess emissions.....</b>	<b>0</b>	<b>0.00 % <sup>2</sup></b>

% Excess Emissions = Total Duration of Excess Emissions/Source Operating Time x 100

<sup>1</sup> For opacity, record all times in minutes. For gases, record all times in hours.

<sup>2</sup> For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in §60.7(c) shall be submitted.



# Steam Flow 4-HR Rolling Exceedance Report

**Facility Name:** Gainesville      **Location:** Gainesville, FL  
**Source:** BFB1  
**Parameter:** STEAM      **Limit:** 930

Data in the Reporting Period: 07/01/2016 00:00 to 09/30/2016 23:59

Inc. No.	Start Date	End Date	Duration	Average	EPA Category	Reason for Incident	Corrective Action
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No Incidents in the Reporting Period

Total Duration in the Reporting Period = 0 Hours

Total Operating Time in the Reporting Period = 39 Hours