11201 NW 13<sup>th</sup> Street Gainesville, FL 32653 www.gainesvillebiomass.com

April 26, 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

Q1 2016 Excess Emission Reports

Dear Mr. Lovallo:

Below please find a summary of our 1<sup>st</sup> Quarter 2016 excess emission reports:

<u>Report</u>	<u>Duration/Comment</u>
NOx lb/mmBtu 30-day Summary	Compliant
NOX & CO lb/mmBtu Excess Emissions	34 hours
SO2 lb/mmBtu 24-hr Summary	Compliant
CO lb/mmBtu 30-day Summary	Compliant
Opacity 6 minute Summary	Compliant
NOX, SO2 TPY 12-Month Rolling	Compliant
NOX lb/MWhr 30 day Summary	Compliant
SO2 lb/MWhr 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,

Vice President of Engineering

**GREC** Asset Manager

LJF/cw enclosures

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 01/01/2016 to 03/31/2016 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: 53 Hours

### CMS Performance Summary

1. CEMS downtime in reporting period due to:	Duration	% Unavailable
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 %
2. Total CEMS Downtime	0	0.00 % 2

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

### **Emission Data Summary**

Duration of excess emissions in reporting period due to:	Duration	% Excess Emissions
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 %
2. Total duration of excess emissions	0	0.00 % 2

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

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

<sup>&</sup>lt;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 – 1st Quarter, 2016

### Startup/Shutdown Exclusions:

lourly NOX Hourly -0.9
1.378
1300 – 1.323 1400 – 1.21
L.025 0.087 13 Hours Common
0.099
0.093
0.452 0.083
0.415 0.083
0.095
0.235 0.105
0.43 0.13
0.243
0.334 0.302
.291 0.291
.355 0.286
.179 0.246
0.22
0.132
0.082
,
16
.0.946
0.571
0.465 0.08 6 Hours Common
0.438 0.087
0.33 0.08
0.233 0.088
0.307 0.103

# NOx & CO lb/MMBtu Excess Emissions – 1st Quarter, 2016

		2300-0.325			
3/10		- 0000	0.13		
		0100 -			
		- 0020			
		0300 -			
		0400 -			
		∞	11		
3/10	1	2100 - 0.564		Shutdown	
Total	34				

Total Quarterly Excluded Hours = 34

Total 12-month Rolling Excluded Hours, Ending  $1^{\text{st}}$  Quarter = 107

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 01/01/2016 to 03/31/2016 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: 53 Hours

### CMS Performance Summary

1. CEMS downtime in reporting period due to:	Duration	% Unavailable 1
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 %
2. Total CEMS Downtime	0	0.00 % 2

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

### **Emission Data Summary**

<ol> <li>Duration of excess emissions in reporting period due to:</li> </ol>	Duration	% Excess Emissions
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 %
2. Total duration of excess emissions	0	0.00 % 2

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

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

<sup>&</sup>lt;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.

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 01/01/2016 to 03/31/2016 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: 53 Hours

### CMS Performance Summary

1. CEMS downtime in reporting period due to:	Duration	% Unavailable 🗈
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 %
2. Total CEMS Downtime	0	0.00 % 2

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

### **Emission Data Summary**

<ol> <li>Duration of excess emissions in reporting period due to:</li> </ol>	Duration	% Excess Emissions
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 %
2. Total duration of excess emissions	0	0.00 % 2

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

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

<sup>&</sup>lt;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.

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 1/1/2016 to 3/31/2016 11:59:59 PM

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:

544 Periods

### CMS Performance Summary

1. CEMS downtime in reporting period due to:	Duration	% Unavailable
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	20	3.68 %
5. Unknown Causes	0	0.00 %
2. Total CEMS Downtime	20	3.68 % <sup>2</sup>

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

### **Emission Data Summary**

Duration of excess emissions in reporting period due to:	Duration	% Excess Emissions
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 %
2. Total duration of excess emissions	0	$0.00 \%^{2}$

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

Report Printed on: 04/28/2016 14:34:24

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

<sup>&</sup>lt;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.

Gaseous and Opacity Excess Emission and Monitoring System Performance

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 1/1/2016 to 3/31/2016 11:59:59 PM

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:

544 Periods

### **CMS Performance Summary**

1. CEMS downtime in reporting period due to:	Duration	% Unavailable 1
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	20	3.68 %
5. Unknown Causes	0	0.00 %
2. Total CEMS Downtime	20	3.68 % 2

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

### **Emission Data Summary**

Duration of excess emissions in reporting period due to:	Duration	% Excess Emissions
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 %
2. Total duration of excess emissions	0	0.00 % 2

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

Report Printed on: 04/28/2016 14:34:39

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

<sup>&</sup>lt;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

Location: Gainesville, FL

Facility Name: Gainesville

Source:

OPACITY Opac

Parameter:

Data in the Reporting Period: 1/1/2016 to 3/31/2016 11:59:59 PM

- 51	_			_		_	_	_			_				
Corrective Action	Incomplete Period - Equipment Testing	Incomplete Period - Startup	Incomplete Period - Shutdown	Incomplete Period - Startup	Incomplete Period - Shutdown	Incomplete Period - Startup	Incomplete Period - Shutdown	Incomplete Period - Equipment Testing							
EPA Downtime Category	Other Known Causes	Other Known Causes	Other Known Causes	Other Known Causes	Other Known Causes	Other Known Causes	Other Known Causes	Other Known Causes							
Reason	Other Known Causes	Other Known Causes	Other Known Causes	Other Known Causes	Other Known Causes	Other Known Causes	Other Known Causes	Other Known Causes							
Duration Periods	2	2	2	_	2	_	τ-	2	-	-	~	-	-	-	1
End Date	01/08/2016 12:41	01/12/2016 10:05	01/29/2016 13:29	02/05/2016 13:23	02/12/2016 13:29	02/22/2016 14:17	02/27/2016 16:35	03/03/2016 15:05	03/06/2016 11:11	03/07/2016 09:53	03/09/2016 16:17	03/09/2016 21:23	03/09/2016 21:41	03/10/2016 22:11	03/21/2016 12:35
Start Date	1 01/08/2016 12:30	2 01/12/2016 09:54	3 01/29/2016 13:18	4 02/05/2016 13:18	5 02/12/2016 13:18	6 02/22/2016 14:12	7 02/27/2016 16:30	03/03/2016 14:54	9 03/06/2016 11:06	10 03/07/2016 09:48	11 03/09/2016 16:12	12 03/09/2016 21:18	13 03/09/2016 21:36	14 03/10/2016 22:06	15 03/21/2016 12:30
Incid. No.	_	2	က	4	5	9	7	∞	6	10	11	12	13	14	15

Total Downtime in the Reporting Period = 20 Periods

Data Availability for this Reporting Period = 96.32 %

Total Operating Time in the Reporting Period = 544 Periods

### Monthly & 12-Month Rolling Report

Gainesville Renewable Energy Center, LLC Company:

11201 NW 13th Street

Gainesville, FL 32653

EU-002

Source:

Summary: Monthly and 12-Month Rolling Totals All Data Groups

Report Name: Data Group:

Start of Report: End of Report:

4/1/2015 00:00 3/31/2016 23:59

	NOx	S02	NOX	802
	Tons/month	Tons/month	12-Month	12-Month
			Rolling	Rolling
4/01/2015 00:00	13.66	0.00	252.36	0.14
5/01/2015 00:00	19.45	0.00	258.61	0.14
6/01/2015 00:00	25.21	0.14	265.42	0.28
7/01/2015 00:00	27.29	0.00	269.91	0.19
8/01/2015 00:00	6.22	0.00	250.93	0.17
9/01/2015 00:00	1.54	0.00	229.37	0.14
10/01/2015 00:00	00.00	0.00	216.45	0.14
11/01/2015 00:00	7.06	0.00	196.54	0,14
12/01/2015 00:00	00.00	0.00	169.53	0.14
1/01/2016 00:00	00.00	0.00	148.56	0.14
2/01/2016 00:00	00.00	00.0	125.43	0.14
3/01/2016 00:00	1.48	0.00	101.94	0.14

Gaseous and Opacity Excess Emission and Monitoring System Performance

NOx lb/MWhr 30 Day EPA Report Pollutant:

Emission Limitation: 1.00

Analyzer Make/Model: **CAI 600** Analyzer Serial Number: Y08012

Reporting Period Dates:

From 01/01/2016 to 03/31/2016 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: 53 Hours

### CMS Performance Summary

1. CEMS downtime in reporting period due to:	Duration	% Unavailable
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 %
2. Total CEMS Downtime	0	0.00 % 2

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

### **Emission Data Summary**

Duration of excess emissions in reporting period due to:	Duration	% Excess Emissions
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 %
2. Total duration of excess emissions	0	0.00 % 2

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

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

<sup>&</sup>lt;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.

Gaseous and Opacity Excess Emission and Monitoring System Performance

SO2 lb/MWhr 30 Day EPA Report Pollutant:

Emission Limitation: 1.40

Analyzer Make/Model: **CAI 600** Analyzer Serial Number: Z01006

Reporting Period Dates: From 01/01/2016 to 03/31/2016 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: 53 Hours

### **CMS Performance Summary**

1. CEMS downtime in reporting period due to:	Duration	% Unavailable 1
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 %
2. Total CEMS Downtime	0	0.00 % 2

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

### **Emission Data Summary**

<ol> <li>Duration of excess emissions in reporting period due to:</li> </ol>	Duration	% Excess Emissions
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 %
2. Total duration of excess emissions	0	0.00 % 2

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

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

<sup>&</sup>lt;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

Gainesville, FL

Location:

Facility Name: Gainesville

BFB1 Source:

Parameter:

STEAM

Limit:

930.00

Data in the Reporting Period: 1/1/2016 to 3/31/2016 11:59:59 PM

No Incidents found in this Reporting Period

**EPA Category** 

Duration Emission Hours Reading

End Date

Start Date

. No.

Corrective Action

Reason for Incident

Total Duration in the Reporting Period = 0 Hours

Total Operating Time in the Reporting Period = 53 Hours