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Aquila

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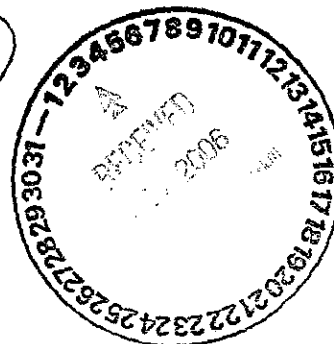
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MAY 11 2006

Missouri Public  
Service Commission

AIR POLLUTION  
CONTROL PGM

Chris



January 27, 2006

Enforcement Unit  
Missouri Department of Natural Resources  
Air Pollution Control Program  
PO Box 176  
Jefferson City, MO 65102-0176

RE: Aquila - South Harper Peaking Facility, 037-0063  
4<sup>th</sup> Quarter Excess Emissions Report

Dear Enforcement Unit:

Pursuant to 40 CFR Part 60.7(d), and Condition 6.E.1 of Construction Permit 122004-017, Aquila submits the attached Excess Emissions Report for the above referenced facility. Please note that on December 6, 2005, Unit 3 recorded two excursions above 15 ppm NOx. The two values recorded were 15.5 and 15.1.

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EVENT EXPLANATION and CORRECTIVE ACTION

The South Harper units, commissioned in August 2005, have had no cold weather operational experience before this season. On December 6, Unit 3 was operating during 16 degree ambient temperatures. Low frequency combustor dynamics and other cold-weather related issues contributed to elevated NOx emissions. Operators made adjustments necessary to lower NOx emissions. Aquila does not anticipate similar future events.

If you have any questions regarding this report, please contact me at 816.737.7527.

Sincerely,

Jeff Creason  
Environmental Engineer

Enclosure

- cc: Tom Miller
- Debbie Nielsen
- Block Andrews
- Steve Brooks
- Corporate File

Exhibit No. 78  
Case No(s) EA-2006-0309  
Date 4-27-06 Rptr KF

# Continuous Emissions Monitoring Quarterly Report

Date: January 26, 2006

Installation Name: Aquila - South Harper Peaking Facility  
 Installation Address: 24400 South Harper Road, Peculiar, MO 64078  
 County Plant Number: 037-0063  
 Reporting Period: October 1, 2005 to December 31, 2005  
 Reporting Under: 40 CFR Part 60.7(d), Construction Permit 122004-017  
 Emission Point: UNIT 1  
 CEMS: Teledyne - API Model 200EM NOx/O2 Analyzer, SN 133  
 Pollutant Monitored (limit): 15 ppmvd of NOx @ 15% O<sub>2</sub>, 3-hr average  
 Date of Last Audit: 8/10/2005 RATA

Total Source Operation Per Emission Point (hours): 9.87

Reasons for Excess Emissions	Code	Duration (hours)
Startup/Shutdown		0
Control Equipment Problems		0
Process Problems		0
Other Known Excess Emissions		0
Unknown Excess Emissions		0
Fuel Problems		0
Cleaning; Soot-Blowing		0
Percent Operating Time Above Standard		0.0%

<1%

Code	Comments
	<b>COPY</b>

Reason for Monitor Downtime	Code	Duration (hours)
CEM Equipment Malfunction		0
Non-CEM Equipment Malfunction		0
Calibration		0
Other Known CEM Downtime *	13	3.88
Unknown CEM Downtime		0
Percent Operating Downtime		39.3%

<5%

Code	Comments
13	* Monitor out-of-control period. A disconnected calibration line resulted in a "failed" calibration and subsequent out-of-control period. The out-of-control period, together with very low operating hours, resulted in relatively high downtime.

Submitted by: Block Andrews, Director of Environmental Services

Signature: Block Andrews Date: 1/30/06

**Continuous Emissions Monitoring Quarterly Report  
Monitor Downtime Form**

Date: January 26, 2006

Source Name: Aquila - South Harper Peaking Facility

Reporting Quarter: Forth, 2005

Emission Point: South Harper Unit 1

Pollutant Monitored (limit): 15 ppm of NOx

Downtime Start		Total Minutes	Downtime End		Reason Code
Date	Time		Date	Time	
10/3/2005	1200	233	10/3/2005	1600	13 - out of control
Sum Downtime		233			

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Submitted by: Block Andrews, Director of Environmental Services

Signature: Block Andrews

Date: 1/30/06



# Continuous Emissions Monitoring Quarterly Report

Date: January 26, 2006

Installation Name: Aquila - South Harper Peaking Facility  
 Installation Address: 24400 South Harper Road, Peculiar, MO 64078  
 County Plant Number: 037-0063  
 Reporting Period: October 1, 2005 to December 31, 2005  
 Reporting Under: 40 CFR Part 60.7(d), Construction Permit 122004-017  
 Emission Point: UNIT 2  
 CEMS: Teledyne - API Model 200EM NOx/O2 Analyzer, SN 134  
 Pollutant Monitored (limit): 15 ppmvd of NOx @ 15% O<sub>2</sub>, 3-hr average  
 Date of Last Audit: 8/9/2005 RATA

Total Source Operation Per Emission Point (hours): 11.02

Reasons for Excess Emissions	Code	Duration (hours)
Startup/Shutdown		0
Control Equipment Problems		0
Process Problems		0
Other Known Excess Emissions		0
Unknown Excess Emissions		0
Fuel Problems		0
Cleaning; Soot-Blowing		0
Percent Operating Time Above Standard		0.0%

<1%

Code	Comments
	<b>COPY</b>

Reason for Monitor Downtime	Code	Duration (hours)
CEM Equipment Malfunction		0
Non-CEM Equipment Malfunction		0
Calibration	12	0.87
Other Known CEM Downtime *	13	3.28
Unknown CEM Downtime		0
Percent Operating Downtime		37.7%

<5%

Code	Comments
13	* Monitor out-of-control period. A disconnected calibration line resulted in a "failed" calibration and subsequent out-of-control period. The out-of-control period, together with very low operating hours, resulted in relatively high downtime.

Submitted by: Block Andrews, Director of Environmental Services

Signature: Block Andrews

Date: 1/30/06

**Continuous Emissions Monitoring Quarterly Report  
Monitor Downtime Form**

Date: January 26, 2006

Source Name: Aquila - South Harper Peaking Facility

Reporting Quarter: Forth, 2005

Emission Point: South Harper Unit 2

Pollutant Monitored (limit): 15 ppm of NOx

Downtime Start		Total Minutes	Downtime End		Reason Code
Date	Time		Date	Time	
10/3/2005	1300	197	10/3/2005	1600	13 - out of control
10/7/2005	0800	52	10/7/2005	0800	12 - calibration
Sum Downtime		249			

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Submitted by: Block Andrews, Director of Environmental Services

Signature: Block Andrews

Date: 1/30/06



# Continuous Emissions Monitoring Quarterly Report

Date: January 26, 2006

Installation Name: Aquila - South Harper Peaking Facility  
 Installation Address: 24400 South Harper Road, Peculiar, MO 64078  
 County Plant Number: 037-0063  
 Reporting Period: October 1, 2005 to December 31, 2005  
 Reporting Under: 40 CFR Part 60.7(d), Construction Permit 122004-017  
 Emission Point: UNIT 3  
 CEMS: Teledyne - API Model 200EM NOx/O2 Analyzer, SN 135  
 Pollutant Monitored (limit): 15 ppmvd of NOx @ 15% O<sub>2</sub>, 3-hr average  
 Date of Last Audit: 8/11/2005 RATA

Total Source Operation Per Emission Point (hours): 16.5

Reasons for Excess Emissions	Code	Duration (hours)
Startup/Shutdown		0
Control Equipment Problems		0
Process Problems		0
Other Known Excess Emissions *	13	1.98
Unknown Excess Emissions		0
Fuel Problems		0
Cleaning; Soot-Blowing		0
Percent Operating Time Above Standard		12.0%

<1%

Code	Comments
	* Low frequency combustor dynamics may have contributed to elevated NOx. See cover letter for more details

Reason for Monitor Downtime	Code	Duration (hours)
CEM Equipment Malfunction		0
Non-CEM Equipment Malfunction		0
QA Calibration	12	1.00
Other Known CEM Downtime *	13	5.33
Unknown CEM Downtime		0
Percent Operating Downtime		38.4%

<5%

Code	Comments
13	* Monitor out-of-control period. A disconnected calibration line resulted in a "failed" calibration and subsequent out-of-control period. The out-of-control period, together with very low operating hours, resulted in relatively high downtime.

Submitted by: Block Andrews, Director of Environmental Services

Signature: Block Andrews Date: 1/30/06



# Continuous Emissions Monitoring Quarterly Report Monitor Downtime Form

Date: January 26, 2006

Source Name: Aquila - South Harper Peaking Facility  
 Reporting Quarter: Forth, 2005  
 Emission Point: South Harper Unit 3  
 Pollutant Monitored (limit): 15 ppm of NOx

Downtime Start		Total Minutes	Downtime End		Reason Code
Date	Time		Date	Time	
10/3/2005	1200	221	10/3/2005	1500	13 - out of control
12/1/2005	0500	99	12/1/2005	0700	13 - out of control
12/5/2005	0600	60	12/5/2005	0600	12 - calibration
<b>Sum Downtime</b>		380			

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Submitted by: Block Andrews, Director of Environmental Services

Signature: Block Andrews Date: 1/30/06

