

January 30, 2013

# RECEIVED

FEB 04 2013

DIVISION OF AIR RESOURCE MANAGEMENT

United States Environmental Protection Agency, Region 4 Air, Pesticides, and Toxic Management Division Sam Nunn Atlanta Federal Center 61 Forsyth Street, SW Atlanta, GA 30303-8960 (404) 562-9077

Re: Submittal of §63.10(e)(3)(vi) Summary Report and §63.10(e)(3)(i) Excess Emissions and CMS Performance Report
Title V Permit No. 1190042-007-AV

American Cement, LLC - Sumterville, Florida

In accordance with the provisions of 40 CFR Part 63.10(e)(3), American Cement Company, LLC. is submitting this Summary report with Excess Emissions and CMS Performance Report for the Sumterville, Florida facility. This report covers the period July 1 through December 31, 2012.

By signing this letter, I certify that I am the responsible official as that term is defined in 40 CFR 63.2. I further certify, based on reasonable inquiry that the enclosed report is to the best of my knowledge and belief true, accurate, and complete.

Sincerely,

AMERICAN CEMENT COMPANY, LLC

Cary Cohrs

President

cc: Mr. Jeffery F. Koerner, FDEP, Tallahassee

Mr. Tom Lubozynski, FDEP, Central District

Mr. William Wall, American Cement Company, LLC

Ms. Candice Hoisington, American Cement Company, LLC

## SUMMARY REPORT – GASEOUS AND OPACITY EXCESS EMISSIONS AND CONTINUOUS MONITORING SYSTEM PERFORMANCE

American Cement Company, LLC 4750 East CR 470 Sumterville, FL 33585

#### Hazardous Air Pollutants monitored at the source:

- $\bullet$  SO<sub>2</sub>
- CO
- NOx
- VOC
- CO<sub>2</sub> (no compliance limits)
- Hg (not for compliance purposes)
- Opacity
- Temperature, as a surrogate for dioxin/furan emissions

#### Description of the process units:

The primary affected source at the facility is the kiln, which is used to produce clinker by heating limestone and other materials for subsequent production of Portland cement. Emissions from the kiln are controlled by a baghouse and exhausted through the main stack. Clinker from the kiln is sent through a clinker cooler, which is controlled by the main baghouse before exhausting to the atmosphere. There is also several material handling points within the plant that are potential sources of emissions.

#### Emission and operating parameter limitations specified in standard:

Each emissions limit is listed with the relevant Excess Emissions and CMS Performance Table. Per the list of relevant standards in Table 1 of 40 CFR 63.1342:

- Main stack exhaust is limited to 0.40 ng TEQ/dscm for dioxin/furan emissions
- Main stack exhaust is limited to 10% opacity on a six-minute block average basis
- All other exhausts are limited to 5% opacity on a six-minute block average basis

#### **EXCESS EMISSIONS AND CMS PERFORMANCE**

#### SO<sub>2</sub>

**Emissions Limit:** 

0.20 lb/ton of clinker; 24-hour rolling average

25.0 lb/hr; 24 hour rolling average

Reporting Period:

July 1, 2012 through December 31, 2012

Monitor Manufacturer:

Sick Maihak

Model Number:

MCS100E

Date of Last CMS Certification or Audit:

December 15, 2012

Total source operating time in reporting period:

2,733 hours

missions data summary (hours) CMS performance summary (hours)		
. Duration of excess emissions in reporting period due to :	1. CMS downtime in reporting period due to:	
a. Startup / shutdown	a. Monitor equipment malfunctions	
b. Control equipment problems0	b. Non-Monitor equipment malfunctions 0	
c. Process problems0_	c. Quality assurance calibration	
d. Other known causes0	d. Other known causes	
e. Unknown causes0		
. Total duration of excess emissions	2. Total CMS downtime	
. Total duration of excess emissions X (100) / [Total	3. [Total CMS Downtime] x (100) / [Total source operating	
ource operating time]		

#### CO

**Emission Limits:** 

2.9 lb/ton clinker, 30-day rolling average

362.5 lb/hr, 30-day rolling average

Reporting Period:

July 1, 2012 through December 31, 2012

Monitor Manufacturer:

Sick Maihak MCS100E

Model Number:

Date of Last CMS Certification or Audit

December 15, 2012

Total source operating time in reporting period:

2,733 hours

Emissions data summary (hours) CMS performance summary (hours)	
1. Duration of excess emissions in reporting period due to:       a. Startup / shutdown.       0         b. Control equipment problems.       0         c. Process problems.       0         d. Other known causes.       0         e. Unknown causes.       0         2. Total duration of excess emissions.       0         3. Total duration of excess emissions X (100) / [Total Source operating time].       0	1. CMS downtime in reporting period due to:         a. Monitor equipment malfunctions       9         b. Non-Monitor equipment malfunctions       0         c. Quality assurance calibration       6         d. Other known causes       0         e. Unknown causes       14         2. Total CMS downtime       16         3. [Total CMS Downtime] x (100) / [Total source operating time]       0.59%

#### NO + NO2 = NOx

**Emissions Limit:** 

1.95 lb/ton clinker; 30-day rolling average

243.8 lb/hr; 30-day rolling average

Reporting Period:

July 1, 2012 through December 31, 2012

#### NO

Monitor Manufacturer:

Model Number:

Date of Last CMS Certification or Audit

Total source operating time in reporting period:

Sick Maihak

MCS100E

December 15, 2012

2,733 hours

Emissions data summary (hours) CMS performance summary (hours)	
1. Duration of excess emissions in reporting period due to:         a. Startup / shutdown	1. CMS downtime in reporting period due to:         a. Monitor equipment malfunctions

#### NO<sub>2</sub>

Monitor Manufacturer:

Model Number:

Date of Last CMS Certification or Audit

Total source operating time in reporting period:

Sick Maihak MCS100E

December 15, 2012

2,733 hours

missions data summary (hours) CMS performance summary (hours)		
Duration of excess emissions in reporting period due to :	CMS downtime in reporting period due to:	
a. Startup / shutdown0	a. Monitor equipment malfunctions 9	
b. Control equipment problems0	b. Non-Monitor equipment malfunctions0	
c. Process problems0	c. Quality assurance calibration9	
d. Other known causes0	d. Other known causes	
e. Unknown causes0	e. Unknown causes1	
2. Total duration of excess emissions	2. Total CMS downtime	
3. Total duration of excess emissions X (100) / [Total	3. [Total CMS Downtime] x (100) / [Total source operating	
Source operating time] 0 %	time] 0.70	

#### VOC/THC

**Emissions Limit:** 

0.12 lb/ton of clinker, 30-day block average

15.0 lb/hr, 30-day block average 20ppmvd (as propane) @ 7% O<sub>2</sub>

Reporting Period:

July 1, 2012 through December 31, 2012

Monitor Manufacturer:

Model Number:

Sick Maihak EuroFID 3010

Date of Last CMS Certification or Audit

September, 26, 2012\*

2,733 hours

Total source operating time in reporting period:

Emissions data summary (hours)	CMS performance summary (hours)	
1. Duration of excess emissions in reporting period due to:	CMS downtime in reporting period due to:	
a. Startup /shutdown0	a. Monitor equipment malfunctions	
b. Control equipment problems0	b. Non-Monitor equipment malfunctions 0	
c. Process problems0	c. Quality assurance calibration	
d. Other known causes	d. Other known causes	
e. Unknown causes0	e. Unknown causes 0	
2. Total duration of excess emissions	2. Total CMS downtime	
3. Total duration of excess emissions X (100) / [Total	3. [Total CMS Downtime] x (100) / [Total source operating	
Source operating time]0.00 %	time] <u>23.50%**</u>	

- \* The EuroFID 3010 was not operable during the 4th quarter CGA.
- \*\* 1) EuroFID Model 3010 FID sent to Sick for repair of internal air leaks and gets 5 year rebuild.
  - 2) EuroFID Model 3010 Controller sent to Sick for replacement of bad circuit boards.
  - 3) EuroFID Model 30101 FID sent to Sick for replacement of igniter and igniter electrode.

#### **OPACITY**

**Emissions Limit** 

10% opacity, 6-minute block

Reporting Period:

July 1, 2012 through December 31, 2012

Monitor Manufacturer:

Sick Maihak

Model Number:

OMD-41-M321

Date of Last CMS Certification or Audit

December 11, 2012

Total source operating time in reporting period:

161,207 minutes

Emissions data summary (minutes) CMS performance summary (minutes)	
1. Duration of excess emissions in reporting period due to:       360         a. Startup / shutdown	1. CMS downtime in reporting period due to:       a. Monitor equipment malfunctions.       54         b. Non-Monitor equipment malfunctions.       180         c. Quality assurance calibration.       1446         d. Other known causes.       0         e. Unknown causes.       0         2. Total CMS downtime.       1680         3. [Total CMS Downtime] x (100) / [Total source operating time].       1.04%

#### INLET TEMPERATURE

Temperature Limit

Date of Dioxin / Furan Report:

Raw Mill On:

332° F, 180-minute rolling average

August 27, 2010

Temperature Limit

Date of Dioxin / Furan Report:

Raw Mill Off:

400° F, 180-minute rolling average

October 18, 2010

Reporting Period:

July 1, 2012 through December 31, 2012

Thermocouple Manufacturer:

Model Number:

Serial Number:

Date of Thermocouple installation:

Pyco

PK-375-310-D-42-B-13A-(Y)

ACC-003

August 15, 2012

Thermocouple Manufacturer:

Model Number:

Serial Number:

Date of Thermocouple installation:

Pyco

PK-375-310-D-42-B-13A-(Y)

ACC-004

November 11, 2012

Total source operating time in reporting period:

161,207 minutes

Emissions data summary (minutes)	CMS performance summary (minutes)
1. Duration of excess emissions in reporting period due to: a. Startup / shutdown	1. CMS downtime in reporting period due to:         a. Monitor equipment malfunctions.       0         b. Non-Monitor equipment malfunctions.       0         c. Quality assurance calibration.       0         d. Other known causes.       0         e. Unknown causes.       0         2. Total CMS downtime.       0         3. [Total CMS Downtime] x (100) / [Total source operating time].       0.00%

#### CO2 CEMS

Reporting Period:

July 1, 2013 through December 31, 2012

Monitor Manufacturer:

Model Number:

Date of Last CMS Certification or Audit

Total source operating time in reporting period:

Sick Maihak MCS100E

December 15, 2012

2,733 hours

CMS performance summary (minutes)	
1. CMS downtime in reporting period due to:	
a. Monitor equipment malfunctions	10
b. Non-Monitor equipment malfunctions	0
c. Quality assurance calibration	10
d. Other known causes	0
e. Unknown causes	0
2. Total CMS downtime	20
3. [Total CMS Downtime] x (100) / [Total source oper	ating
time]	

#### **MERCURY CEMS**

Reporting Period:

July 1, 2013 through December 31, 2012

Monitor Manufacturer:

Thermo Fisher Scientific

Model Number:

80i

Date of Last CMS Certification or Audit

December 12, 2012

Total source operating time in reporting period:

2,733 hours

1. CMS downtime in reporting period due to:	
a. Monitor equipment malfunctions	<u>57</u>
b. Non-Monitor equipment malfunctions	
c. Quality assurance calibration	
d. Other known causes	0
e. Unknown causes	
2. Total CMS downtime	
3. [Total CMS Downtime] x (100) / [Total source	e operating
time]	

### ADDITIONAL INFORMATION REQUIRED BY NESHAP SUBPART LLL

Per 40 CFR 63.1354(b)(9)

- Exceedances of maximum control device inlet temperature sensors 149 Minutes
- Failures to calibrate thermocouples None
- Results of combustion system components inspection. July 3, 2012
- Failure to comply with any provision of the operations and maintenance plan None

American Cement, LLC is submitting the startup, shutdown, and malfunction report with this report under separate cover. As noted in §63.10(d)(5)(i), the startup, shutdown, and malfunction report can be submitted simultaneously with the summary report.