Title V Air Operation Permit Renewal
Permit No. 0010087-041-AV

APPLICANT

The applicant for this project is Florida Rock Industries, Inc. - Thompson S. Baker Cement Plant - Newberry. The applicant's responsible official and mailing address are: Mr. Chris Horner, Plant Manager, Florida Rock Industries, Inc. - Thompson S. Baker Cement Plant - Newberry, at 4000 NW County Road 235, Newberry, Florida 32669.

FACILITY DESCRIPTION

The applicant operates the Thompson S. Baker Cement Plant - Newberry, which is located at 4000 NW County Road 235, Newberry, Florida 32669.

This facility began construction in March 1997 (existing source) and consists of raw material handling and storage, raw mill systems, kiln systems clinker handling, finish grinding operations, cement handling, loading, and bagging operations, and coal handling and grinding operations.

E.U. ID No.	Brief Description
-001	Raw Material Handling and Storage
-002	Raw Mill System- Line 1
-003	Kiln System- Line 1
-004	Clinker Handling- Line 1
-005	Finish Grinding Operations- Line 1
-006	Cement Handling, Loading, and Bagging Operations
-007	Coal Handling and Grinding Operation- Line 1
-008	Clinker to Railcar/ Truck Conveyor
-009	Raw Mill System Line 2
-010	In line Kiln/Raw Mill- Line 2
-011	Clinker Handling- Line 2
-012	Finish Grinding Operation- Line 2
-013	Cement Load-Out Silos 6 & 7
-014	Coal Handling - Mill 2
-017	Three Emergency Engines
Unregulated	Paved roads

Emission Unit ID No. 017: Three Emergency Engines

E.U. ID No.	Brief Description
017	Three Emergency Engines Engine No. 1: Power unit for emergency electrical generator for Kiln No. 1, manufactured by Caterpillar. Engine No. 2: Power unit for emergency electrical generator for Kiln No. 2, manufactured by Caterpillar. Engine No. 3: Power unit for emergency, centrifugal-type fire pump, manufactured by Clarke Detroit Diesel-Allison, Inc.

Also included in this permit are miscellaneous unregulated/insignificant emissions units and/or activities.

PROJECT DESCRIPTION

The purpose of this permitting project is to renew the existing Title V permit and add 40 CFR 63 Subpart LLL revised emissions limits for existing Portland cement plants at a major source for the above referenced facility.

PROCESSING SCHEDULE AND RELATED DOCUMENTS

Renewed Title V Air Operation Permit issued January 25, 2007
Title V Air Operation Permit Revision issued October 5, 2010
Application for a Title V Air Operation Permit Renewal received June 7, 2011
Notice of Intent to Issue Air Permit issued August 31, 2011
Public Notice Published March 30, 2012

PRIMARY REGULATORY REQUIREMENTS

Title III: The facility is identified as a major source of hazardous air pollutants (HAP).

Title V: The facility is a Title V major source of air pollution in accordance with Chapter 62-213, Florida Administrative Code (F.A.C.).

PSD: The facility is a Prevention of Significant Deterioration (PSD)-major source of air pollution in accordance with Rule 62-212.400, F.A.C.

NSPS: The facility does operate units subject to the New Source Performance Standards (NSPS) of 40 Code of Federal Regulations (CFR) 60.

NESHAP: The facility does operate units subject to the National Emissions Standards for Hazardous Air Pollutants (NESHAP) of 40 CFR 63.

CAIR: The facility is not subject to the Clean Air Interstate Rule (CAIR) set forth in Rule 62-296.470, F.A.C.

CAM: Compliance Assurance Monitoring (CAM) does not apply to any of the units at the facility (all emissions units are Post 1990 federal standards and are presumed to be incompliance with CAM).

{Permitting Note: The facility is also subject to the federal requirements of the Greenhouse Gas Reporting Program codified at 40 CFR 98. This is not a requirement of the State of Florida.}

PROJECT REVIEW

Below are the changes that were made as part of this renewal (i.e. reformatting, replacement of TV-6 with new Appendix TV, streamlining of EU sections by moving common conditions to the new appendices, etc.). Numerically listed are the discussions of the reasons for the changes being made as part of this project, followed by the conditions(s) being changed. Show the changes in the condition with a ~~strikethrough format~~ for deletions and a double underline format for additions.

No. 1: In accordance with 40 CFR 63 Subpart LLL (2006), (EU003 Kiln and EU010 In line Kiln/Raw Mill-2) are considered existing sources (construction was commenced on or prior to December 2, 2005) and the standards for a new source are not applicable to these units. This subpart revised emissions limits for **existing** Portland cement plants at a major source, so those limits have been added to this project (75 FR 54970; 75 FR 54993).

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No. 2: Clarification:
In accordance with 40 CFR 63 Subpart LLL, (EU003 Kiln) is considered an existing source (construction was commenced on or prior to December 2, 2005) and the standards for a new source ~~emissions standards~~ are not applicable to these units.

No. 3: C.5.a. Mercury (Hg) 2006 NESHAP. Total input of mercury compounds (as Hg) in all materials and fuel kiln system shall not exceed 200 pounds per year **until 09/08/2013**.

[Permit No. AC01-267311/PSD-FL-228]

No. 4: C.5.b. Mercury (Hg) 2010 NESHAP. On and after 09/09/2013, Mercury Emissions (Hg) shall not exceed 10 ug/dscm during startup and shutdown and 55 lb/MM tons clinker during normal operation.

[40 CFR 63.1343(b)(1)]

Pursuant to 40 CFR 63.1351(c), the compliance date for existing sources for (Hg) emissions that became effective on November 8, 2010 will be September 9, 2013. On September 9, 2013, the previous limit of Specific Condition No. C.5.a. no longer applies.

No. 5: C.6. a. Visible Emissions (Kiln) 2006 NESHAP. Until 9/8/2013, Visible emissions from the kiln shall not exceed 10 percent opacity.

[Permit No. AC01-267311/PSD-FL-228; BACT; 40 CFR 63.1343(b)(2) subsumed].

{Permitting Note: The averaging time for **Condition C.6.** is based on the run time of the specified test method.}

No.6. C.6.b. Visible Emissions (Kiln) 2010 NESHAP. After 9/9/2013, the VE limitation on the kiln will no longer be applicable because of the PM CEMS.

No.7. C.7.a. Particulate Matter 2006 NESHAP. Until 9/8/2013, Particulate Matter emissions shall not exceed 0.14 pounds per ton of dry feed to the preheater and 0.23 pounds per ton of clinker, and 25.9 lb/hr and 94 ton/yr.

[Permit No. 0010087-006-AC (PSD-FL-228C); BACT, 40 CFR 63.1343(b)(1) subsumed, 40 CFR 60.62(a)(1)(i) subsumed, 40 CFR 60.62(d)]
{Permitting Note: The averaging time for **Condition C.7.** is based on the run time of the specified test method **until 9/8/2013**. On and after **9/9/2013**, CEMS is required for compliance and the average time is 30-day rolling average (40 CFR 63.1343(a))}

No.8: C.7. b. Particulate Matter for (Kiln 1) 2010 NESHAP. On and after 9/9/2013, Particulate Matter emissions shall not exceed 0.04 pounds per ton of clinker (normal operation) and 0.004 gr/dscf (startup and shutdown).

[40 CFR 63.1343(b)(1) Table 1, 40 CFR 63.1343(b)(1) subsumed, 40 CFR 60.62(a)(1)(i) subsumed, 40 CFR 60.62(d)]

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No.8: C.7. b. continued:

Pursuant to 40 CFR 63.1351(c), the compliance date for existing sources for PM emissions that became effective on November 8, 2010 will be September 9, 2013. On September 9, 2013, the previous limit of Specific Condition No. C.7.a. no longer applies.

{Permitting Note: The averaging time for **Condition C.7.b.** is based on the run time of the specified test method.}

No. 9: C.12. VOC (2006 NESHAP). Until 9/8/2013, VOC emissions shall not exceed 0.075 lb/ton of dry feed to the preheater and 0.11 pounds per ton of clinker and 11.8 lb/hr (1-hr average), and 43 ton/year. **Beginning 09/09/ 2013**, in accordance with 40 CFR 63, Subpart LLL, this EU will be subject to the THC limit in **Specific Condition No. C.8.**

[Permit No. 0010087-006-AC (PSD-FL-228C)]

No. 10: C.18. Note [[3] Pursuant to **40 CFR 63.1350(c)(1),** Subpart LLL 2006 NESHAP, installed, maintained, and continuously operate a COM located at the outlet of the PM control device to continuously monitor the opacity. The COM shall be installed, maintained, calibrated, and operated as required by Subpart A, general provisions of this part, and according to PS-1 of Appendix B to Subpart 60 of this chapter. The compliance date for existing sources for visible emissions that became effective on November 8, 2010 will be September 9, 2013. **After September 9, 2013 has passed, the previous requirement for a COM will still be applicable as per AC01-267311/PSD-FL-228.**

No. 11: C.20.a. Visible Emissions (Kiln) 2006 NESHAPS. Compliance shall be demonstrated with use of a continuous opacity monitor. The continuous opacity monitor must comply with 40 CFR 63.1350(c)(3) which states " to remain in compliance, the opacity must be maintained such that the 6-minute average opacity for any 6-minute block period does not exceed 20 percent. If the average opacity for any 6-minute block period exceeds 20 percent, this shall constitute a violation of the standard".

[Permit No. AC01-267311/PSD-FL-228; 40 CFR 63.1349(b)(1)(v); 40 CFR 63.1350(c)(3)].

No. 12: C.20.b. Visible Emissions (Kiln). The test method for visible emissions shall be EPA Method 9 in accordance with 40 CFR 60 Appendix A.

Pursuant to 40 CFR 63.1351(c), the compliance date for existing sources for visible emissions that became effective on November 8, 2010 will be September 9, 2013. On September 9, 2013, the previous limit of Specific Condition No. C.20.a. no longer applies.

[40 CFR 63.1349(b)(2)]

No. 13. C.21. Particulate **Matter 2010 NESHAPS.** The test method for particulate matter emissions shall be EPA Method 5 in accordance with 40 CFR 60 Appendix A and 40 CFR 63.1349 NESHAP for Portland Cement Manufacturing Industry. **On and after 09/09/2013**, PM compliance shall be demonstrated by CEMS.

[Permit No. AC01-267311/PSD-FL-228 and BACT; 40 CFR 60.64, 40 CFR 60.64(b)(2) and 40 CFR 63.1349(b)(1) subsumed]

No. 14. C.22. Particulate Matter (PM_{10}). The test method for PM_{10} emissions shall be EPA Method 5 in accordance with 40 CFR 60 Appendix A, with all PM assumed to be PM10.

[Permit No. AC01-267311/PSD-FL-228 and BACT; 40 CFR 60.64 subsumed].

No. 15: C.32. b. PM Emissions Tests (Continuous Emissions Monitors). On and after 9/9/2013, you must install, operate, calibrate, and maintain a PM CEMS in accordance with the requirements in §63.1350(b).....

No. 16: C.32. c. HCL Emissions Tests (Continuous Emissions Monitors). For a source subject to limitations on HCl emissions you must conduct performance testing by the following method:

(A)**On and after 9/9/2013** you must operate a CEMS in accordance with the requirements of §63.1350(l)(1). The initial performance test must be the first 30 operating days you use the CEMS:...

No. 17: C.32.d. THC Emissions Tests (Continuous Emissions Monitors).

THC CEMS

(A) **Prior to 09/08/2013**, THC monitoring is subject to 2006 NESHAP, you must operate a continuous emissions monitoring system (CEMS) in accordance with the requirements in §63.1350(h)(1)-(h)(3):...

No. 18: C.32.e. THC Monitoring Requirements: THC emissions must comply with the monitoring requirements of paragraphs (i)(1) and (i)(2) and (m)(1) through (m)(4) of §63.1350. You must also develop an emissions monitoring plan in accordance with paragraphs (p)(1) through (p)(4) of §63.1349

(1) **On and after 9/9/2013**, you must install, operate, and maintain a THC continuous emission monitoring system in accordance with Performance Specification 8 of appendix B to part 60 of 40 CFR 60 and comply with all of the requirements for continuous monitoring systems found in the general provisions, subpart A of this part. The owner or operator must operate and maintain each CEMS according to the quality assurance requirements in Procedure 1 of appendix F in part 60 of 40 CFR 60.

[40 CFR 63. 1350(i)]

No. 19: C.34. Continuous Temperature Monitor. Now and after 9/9/2013, the owner shall install, calibrate, maintain, and continuously operate a continuous monitor to record the temperature of the exhaust gases from the kiln, in- line kiln/raw, at the inlet to, or upstream of, the kiln, in-line kiln/raw mill PM control device.

[40 CFR 63.1350(f)(1) 2006 NESHAP; 40 CFR 63.1350(g)1 2010 NESHAP]

No. 20: D.3.a. Particulate Matter (Clinker Cooler). Until 9/8/2013, Particulate Matter emissions from the Clinker Cooler shall not exceed 0.08 pounds per ton of feed (dry basis) to the preheater and 0.14 pounds per ton of clinker. The PM shall also not exceed 15.4 lbs/hr and 56 tons/year.

[Permit No. AC01-267311/PSD-FL-228 and BACT, 40 CFR 60.62(b)(1), 40 CFR 60.62(d), 40 CFR 63.1345(a)(1) Permit No. 0010087-006-AC (PSD-FL-228C)]

{Permitting Note: The averaging time for Condition D.3. is based on the run time of the specified test method.}

No. 21: D.3.b. Particulate Matter (Clinker Cooler). On and after 9/9/2013, Particulate Matter emissions from the Clinker Cooler shall not exceed 0.04 pounds per ton of clinker under normal operation and 0.004 gr/dscf under startup and shutdown.

[40 CFR 63.1343(b)(1) Table 1(Rows 9 and 10)]

Pursuant to 40 CFR 63.1351(c), the compliance date for existing sources for PM emissions that became effective on November 8, 2010 will be September 9, 2013. On September 9, 2013, the previous limit of Specific Condition No. D.3.a. no longer applies.

{Permitting Note: The averaging time for Condition D.3.b is based on the run time of the specified test method.}

No. 22: D.4. Particulate Matter (PM_{10}) 2006 NESHAPS. Until 9/8/2013, PM_{10} emissions from the cooler shall not exceed 0.12 pounds per ton of clinker.

[Permit No. AC01-267311/PSD-FL-228 BACT, and 0010087-006-AC (PSD-FL-228C)]

{Permitting Note: The averaging time for **Condition D.4.** is based on the run time of the specified test method. After 9/9/2013, the PM standard (0.04 lb/ton clinker) will be more stringent than the current PM10 standard. Therefore, after 9/9/ 2013, the PM10 standard is no longer applicable}.

No. 23: D.5. Particulate Matter. Particulate Matter emissions...

No. 24: D.8.a.

No. 25: D.8.b. Opacity Monitoring Requirements (EP01, EP02).

If you are subject to a limitation on opacity under §63.1345, you must conduct required emissions monitoring in accordance with the provisions of paragraphs (f)(1)(i) through (f)(1)(vii) of §63.1350 and in accordance with the operation and maintenance plan developed in accordance with §63.1347. You must conduct emissions monitoring in accordance with paragraphs (f)(2)(i) through (f)(2)(iii) of §63.1350 and in accordance with the operation and maintenance plan developed in accordance with (p)(1) through (p)(4) of this section. You must also develop an opacity emissions monitoring plan in accordance with paragraphs (o)(1) through (o)(4) and paragraph (o)(5), if applicable, of §63.1350....

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No. 26: D.9. a. Visible Emissions (Clinker Cooler) 2006 NESHAPS. Until 9/8/2013, compliance shall be demonstrated with use of a continuous opacity monitor. Thereafter, there will be a PM CEMS in lieu of a VE limit **2010 NESHAPS**.

[Permit No. AC01-267311/PSD-FL-228]

No. 27. D.9. b. Visible Emissions (Clinker Cooler). **Until 9/9/2013,** the test method for visible emissions shall be EPA Method 9 in accordance with 40 CFR 60 Appendix A.
[40 CFR 63.1349(b)(2)].

No. 28: D.11. **Particulate Matter (EP03).** The test method for particulate matter emissions shall be EPA Method 5 in accordance with 40 CFR 60 Appendix A, and set forth in 40 CFR 60.64 of the NSPS for Portland Cement Plants and 40 CFR 63.1349 NESHAP for Portland Cement Manufacturing Industry.

After 09/09/2013, compliance shall b determined with a PM CEMS.

[Permit No. AC01-267311/PSD-FL-228 and BACT; 40 CFR 60.64, 40 CFR 63.1350 subsumed].

No. 29: D.14.a. Continuous Opacity Monitors (COM). Now and after 09/09/2013, COMs shall be installed, operated, and maintained at the Clinker Cooler ESP stack.

[Permit No. AC01-267311/PSD-FL-228; 40 CFR 63.1350(d)(1)

No. 30: D.14.b Continuous **Emission Monitors (CEM) 2010 NESHAPS. On and after 09/09/2013,** install a PM CEMS:

(1) For a clinker cooler subject to emissions limitation on particulate matter emissions in §63.1343(b) and using a PM CEMS, you must install and operate a continuous emissions monitor in accordance with Performance Specification 11 of appendix B and Procedure 2 of appendix F to part 60 of this chapter. The performance test method and the correlation test method for Performance Specification 11 must be Method 5 or Method 5i of appendix A to Part 60 of this chapter. You must also develop an emissions monitoring plan in accordance with paragraphs (o)(1) through (o)(4) of this section...

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No. 31: D.15. Excess Visible Emissions. As required by 40 CFR 63.1354(b)(8-10), the owner or operator of an affected source equipped with a continuous emission monitor shall submit an excess emissions and continuous monitoring system performance report for any event when the continuous monitoring system data indicate the source is not in compliance with the applicable emission limitation or operating parameter limit. The owner or operator shall submit a summary report semiannually which contains the information specified in 40 CFR 63.10(e)(3)(vi). In addition, the summary report shall include:

(i) (Not applicable)

(ii) (Not applicable)

(iii) (Not applicable.)

(iv) The results of any combustion system component inspections conducted within the reporting period as required under 40 CFR 63.1350(i).

(v) All failures to comply with any provision of the operation and maintenance plan developed in accordance with 40 CFR 63.1350(a)....

No. 32: D.16. Clinker Material Storage and Handling Activities. **On and after 9/9/2013**, if clinker material storage and handling activities occur more than 1,000 feet from the facility property-line you must comply with the following:

(1) Utilize a three-sided barrier with roof, provided the open side is covered with a wind fence material of a maximum 20 percent porosity, allowing a removable opening for vehicle access. The removable wind fence for vehicle access may be removed only during minor or routine maintenance activities, the creation or reclamation of outside storage piles, the importation of clinker from outside the facility, and reclamation of plant clean-up materials. The removable opening must be less than 50 percent of the total surface area of the wind fence and the amount of time must be minimized to the extent feasible....

No. 33. E.4.~~a. and E.4.b.~~

No. 34: E. 5.a. Opacity Monitoring Requirements. (EP's 02, 05, 06 & 07). Prior to 09/08/2013, if you were subject to a limitation on opacity under §63.1348, (2006 NESHAP) you must conduct required emissions monitoring in accordance with §63.1350 paragraphs (a)(4)(i)- (a)(4)(iv)Procedures to be used to periodically monitor affected sources subject to opacity standards under §§63.1346 and 63.1348. Such procedures must include the provisions of paragraphs (a)(4)(i) through (a)(4)(iv) of this section....

No. 35: E.5.b. Opacity Monitoring Requirements. (EP's 02, 05, 06 & 07). On and after 09/09/2013, sources subject to a limitation on opacity under §63.1345, (2010 NESHAP) you must conduct required emissions monitoring in accordance with the provisions of paragraphs (f)(1)(i) through (f)(1)(vii) of §63.1350 and in accordance with the operation and maintenance plan developed in accordance with §63.1347. You must conduct emissions monitoring in accordance with paragraphs (f)(2)(i) through (f)(2)(iii) of §63.1350 and in accordance with the operation and maintenance plan developed in accordance with (p)(1) through (p)(4) of §63.1350. You must also develop an opacity emissions monitoring plan in accordance with paragraphs (o)(1) through (o)(4) and paragraph (o)(5), if applicable, of §63.1350.....

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No. 36. E.5.c. Opacity Monitoring Requirements. (EP's 03 & 04). Now and after 09/09/2013, you are subject to a limitation on opacity under §63.1347(2006 & 2010 NESHAP), you must conduct the following required emissions monitoring:...

No. 37. E.6.~~a~~

No. 38: CONTINUOUS COMPLIANCE REQUIREMENTS

F.5.a. Opacity **Monitoring Requirements (each EP). Prior to 09/08/2013,** sources subject to a limitation on opacity under §63.1348, (2006 NESHAP) you must conduct required emissions monitoring in accordance with §63.1350 paragraphs (a)(4)(i)- (a)(4)(iv)Procedures to be used to periodically monitor affected sources subject to opacity standards under §§63.1346 and 63.1348. Such procedures must include the provisions of paragraphs (a)(4)(i) through (a)(4)(iv) of this section.
(i) The owner or operator must conduct a monthly 1-minute visible emissions test of each affected source in accordance with Method 22 of Appendix A to part 60 of this chapter. The test must be conducted while the affected source is in operation....

No. 39: F.5.b. Continuous Opacity Compliance. On and after 9/9/2013, sources subject to a limitation on opacity under §63.1345, (2010 NESHAP) you must conduct required emissions monitoring in accordance with the provisions of paragraphs (f)(1)(i) through (f)(1)(vii) of §63.1350and in accordance with the operation and maintenance plan developed in accordance with §63.1347. You must conduct emissions monitoring in accordance with paragraphs (f)(2)(i) through (f)(2)(iii) of §63.1350 and in accordance with the operation and maintenance plan developed in accordance with (p)(1) through (p)(4) of §63.1350. You must also develop an opacity emissions monitoring plan in accordance with paragraphs (o)(1) through (o)(4) and paragraph (o)(5), if applicable, of §63.1350....

No. 40: F.7. Visible Emissions- Test Method (Each EP). The test method for visible emissions shall be EPA Method 9 in accordance with 40 CFR 60 Appendix A-4.

In accordance with Rule 62-297.310(4)(a)2, F.A.C., the duration of the Method 9 performance is 30-minutes for emissions points <100 tpy of particulate matter and are not subject to a multiple-valued opacity standard.

Initial VE after 9/9/2013 only, the duration of the Method 9 performance test must be 3 hours (30, 6-minute averages), except that the duration of the Method 9 performance test may be reduced to 1 hour if the conditions of paragraphs(i) through (ii) of this condition apply. For batch processes that are not run for 3-hour periods or longer, compile observations totaling 3 hours when the unit is operating....

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No. 41: H.5. Continuous Opacity Compliance (Each EP): The permittee shall demonstrate continuous compliance with the opacity emissions standards by using the monitoring methods and procedures in §63.1350(f). See Specific Condition **H.6....**

No. 42: H.6.a. Opacity monitoring requirements (each EP) 2010 NESHAPS). Prior to 09/08/2013, sources subject to a limitation on opacity under §63.1348, (2006 NESHAP) you must conduct required emissions monitoring in accordance with §63.1350 paragraphs (a)(4)(i)- (a)(4)(iv)Procedures to be used to periodically monitor affected sources subject to opacity standards under §§63.1346 and 63.1348. Such procedures must include the provisions of paragraphs (a)(4)(i) through (a)(4)(iv) of this section.
(i) The owner or operator must conduct a monthly 1-minute visible emissions test of each affected source in accordance with Method 22 of Appendix A to part 60 of this chapter. The test must be conducted while the affected source is in operation...

No. 43: H.6.b. Opacity monitoring requirements (each EP) 2010 NESHAPS).

On and after 9/9/13, sources subject to a limitation on opacity under §63.1345, you must conduct required emissions monitoring in accordance with the provisions of paragraphs (f)(1)(i) through (f)(1)(vii) of §63.1350 and in accordance with the operation and maintenance plan developed in accordance with §63.1347. You must conduct emissions monitoring in accordance with paragraphs (f)(2)(i) through (f)(2)(iii) of §63.1350 and in accordance with the operation and maintenance plan developed in accordance with (p)(1) through (p)(4) of §63.1350. You must also develop an opacity emissions monitoring plan in accordance with paragraphs (o)(1) through (o)(4) and paragraph (o)(5), if applicable, of §63.1350....

No. 44: K.2. Operation and Maintenance Plans (O&M Plans). The owner or operator shall comply with the O&M Plans submitted to the Department for approval for each affected facility as required by 40 CFR 63.~~1350(a)~~ 1347. Failure to comply with any provisions of the O&M Plans shall be a violation of the standard.
[~~40 CFR 63.1350(b)~~ 40 CFR 63.1347(3)(b)]

No. 45: K.4. Reporting. Rule citation change [40 CFR 63.1354(~~a~~b)(4-5)]

No. 46: K.5.a. § 63.1355 Recordkeeping Requirements.

(a) The owner or operator shall maintain files of all information (including all reports and notifications) required by this section recorded in a form suitable and readily available for inspection and review as required by §63.10(b)(1). The files shall be retained for at least five years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent two years of data shall be retained on site. The remaining three years of data may be retained off site. The files may be maintained on microfilm, on a computer, on floppy disks, on magnetic tape, or on microfiche....

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K.5.b. § 63.1355 Recordkeeping Requirements 2010 NESHAPS On and after 09/09/2013.

(a) The owner or operator shall maintain files of all information (including all reports and notifications) required by this section recorded in a form suitable and readily available for inspection and review as required by §63.10(b)(1). The files shall be retained for at least five years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent two years of data shall be retained on site. The remaining three years of data may be retained off site. The files may be maintained on microfilm, on a computer, on floppy disks, on magnetic tape, or on microfiche....

No. 47: **L.3. Visible Emissions.** Visible emissions from each emission point of this emissions unit shall not exceed 5% opacity (No visible emissions). Demonstrate compliance with the visible emission limits annually, using EPA Method 9. This limit is stricter than the 10% opacity in 40 CFR 63. 1348 (2006 NESHAPS) and 40 CFR 63.1343(b)(1) (2010 NESHAP).

[Rule 62-297.310(7)(a)4.a., F.A.C., Permit No. 0010087-031-AC and 40 CFR 63.1343 subsumed; 40 CFR 63.1345**]**

No. 48: L.7.a. Opacity Monitoring Requirements (Each EP). Prior to 09/08/2013, sources subject to a limitation on opacity under §63.1348, (2006 NESHAP) you must conduct required emissions monitoring in accordance with §63.1350 paragraphs (a)(4)(i)- (a)(4)(iv)Procedures to be used to periodically monitor affected sources subject to opacity standards under §§63.1346 and 63.1348. Such procedures must include the provisions of paragraphs (a)(4)(i) through (a)(4)(iv) of this section.
(i) The owner or operator must conduct a monthly 1-minute visible emissions test of each affected source in accordance with Method 22 of Appendix A to part 60 of this chapter. The test must be conducted while the affected source is in operation....

No. 49: L.7.b. Opacity Monitoring Requirements (Each EP). Sources subject to a limitation on opacity under §63.1345, you must conduct required emissions monitoring in accordance with the provisions of paragraphs (f)(1)(i) through (f)(1)(vii) of §63.1350 and in accordance with the operation and maintenance plan developed in accordance with §63.1347. You must conduct emissions monitoring in accordance with paragraphs (f)(2)(i) through (f)(2)(iii) of §63.1350 and in accordance with the operation and maintenance plan developed in accordance with (p)(1) through (p)(4) of §63.1350. You must also develop an opacity emissions monitoring plan in accordance with paragraphs (o)(1) through (o)(4) and paragraph (o)(5), if applicable, of §63.1350....

No.50: M.2. a. Pollutant Emissions Limits (Until 09/08/2013). (2006 NESHAPS) Emissions shall not exceed the following limits for the following pollutants. Emissions from the natural gas fired air heater are included in the limits below.

POLLUTANT	EMISSION LIMIT		AVERAGING TIME	BASIS
PM	0.136 lb/ton of dry preheater feed; 0.23 lb/ton of clinker	28.8 lb/hr	3 hours [2]	BACT
PM_{10}	0.118 lb/ton of dry preheater feed; 0.20 lb/ton of clinker **(On & after 9/9/13 all PM must meet M.2.b.)**	25.0 lb/hr	3 hours [2]	BACT
SO_2	0.28 lb/ton of clinker	35.0 lb/hour	24 hours [3]	BACT
NOx	1.95 lb/ton of clinker	243.75 lb/hour	30 day	BACT
CO	3.6 lb/ton of clinker	450.0 lb/hour	24 hours [4]	BACT
VOC	0.12 lb/ton of clinker [1]	15.0 lb/hour [1]	30 days [5]	BACT
VE	10% opacity		6 minutes [6]	BACT
Mercury	----	122 lb/yr		BACT
DIOX (D/F)	0.20 ng per dscm (8.7×10^{-11} gr per dscf)(TEQ) corrected to 7 percent oxygen; or 0.40 ng per dscm (1.7×10^{-10} gr/dscf)(TEQ) corrected to 7 percent oxygen, when the average of the performance test run average temperatures at the inlet of the particulate matter control device is 204° C (400° F) or less.	----	(3) 3 hours runs Every 30 months	40 CFR 63.1343(b)(1)
THC	50 ppmv	----		40 CFR 63.1343(c)(4)

No.51: **M.2.b. Pollutant Emissions Limits (After 09/09/2013). (2010 NESHAPS)** Emissions shall not exceed the following limits for the following pollutants. Emissions from the natural gas fired air heater are included in the limits below.

POLLUTANT	EMISSION LIMIT	AVERAGING TIME	BASIS
PM	0.04 lb/ton of clinker (normal operation); and 0.004 gr/dscf (startup and shutdown)	CEMS	BACT 40 CFR 63.1343(b)(1)
Mercury (Hg)	10 ug/dscm during startup and shutdown and 55 lb/MM tons clinker during normal operation.	CEMS	40 CFR 63.1343(b)(1)
Hydrogen Chloride HCL	3[3] ppmvd Startup and shutdown	CEMS	40 CFR 63.1343(b)(1)
THC	24 [1,2] ppmvd Startup and shutdown	CEMS	40 CFR 63.1343(b)(1)

No. 52: **M.3. Particulate Matter**. No owner or operator of a Portland Cement kiln shall cause, permit, or allow the emission of particulate matter in excess of 0.30 pounds per ton to the kiln (dry basis, excluding fuel), or visible emissions the density of which is greater than 20 percent opacity.

[Rule 62-296.407(2)(a), F.A.C.; Air Construction Permit No. 0010087-021-AC]

The compliance date for existing sources for PM emissions that became effective on November 8, 2010 will be September 9, 2013. After September 9, 2013 has passed, the previous limit of **Specific Condition No. M.3.** PM emissions no longer applies.

No.53: **M.11. Mercury into the Pyroprocessing System Limited**. **Until 9/8/2013,** the total mass of mercury compounds introduced into the pyroprocessing system, expressed as Hg, in raw mill feed and fuels shall not exceed 122 pounds per consecutive 12-month period. Annual emissions based on materials and fuel analysis. **On September 9, 2013, this Hg emission no longer applies.**

[62-4.070(3), F.A.C.; and Air Construction Permit No. 0010087-031-AC]

No. 54: **M.15. CEM System Requirements (THC).** The calibration, maintenance, operation, record keeping, and reporting of the CEM system shall comply with the requirements of 40 CFR 60.7 and 60.13; 40 CFR 60 Appendix B, Performance Specifications; and, Appendix F, Quality Assurance Procedures. [Rules 62-4.070(3), 62-210.800 and 62-297.520, F.A.C., and BACT]

[Note: 40 CFR 60 Appendix B and Appendix F have been omitted for brevity. See the Code of Federal Regulations for the text of these sections; and Air Construction Permit No. 0010087-031-AC.]

No. 55:... {Permitting Notes:

- PM CEMS, on and after **09/09/2013** you must install and operate a continuous emissions monitor in accordance with Performance Specification 11 of appendix B and Procedure 2 of appendix F to part 60 of this chapter. The performance test method and the correlation test method for Performance Specification 11 must be Method 5 or Method 5i of appendix A to Part 60 of this chapter.
- HCl CEMS - See **Specific Condition No. M.24.b.**
- THC CEMS - THC continuous emission monitoring system in accordance with Performance Specification 8 of appendix B to part 60 of this chapter and comply with all of the requirements for continuous monitoring systems found in the general provisions, subpart A of this part.
- Mercury CEMS- On and after **09/09/2013** you must install and operate a mercury continuous emissions monitoring system (Hg CEMS) in accordance with Performance Specification 12A of appendix B to part 60 of this chapter or a sorbent trap-based integrated monitoring system in accordance with Performance Specification 12B of appendix B to part 60 of this chapter.
- **After 09/09/2013**, NOx no longer applicable.
- **After 09/09/2013**, VE Method 9 no longer applicable (PM CEMS)}

[Rule 62-297.310(7)(a)4, F.A.C.; 40 CFR 63.1349 and 40 CFR 63.1350]

No. 56: M.22. Material Balance Records of Mercury. **Until 9/9/2013**, the owner or operator shall demonstrate compliance with the mercury throughput limitation by material balance and making and maintaining records of monthly and rolling 12-month mercury throughput. The owner or operator shall, for each month of sampling required by this condition, perform daily sampling of the raw mill feed, coal, petroleum coke, and tires, and shall composite the daily samples each month, and shall analyze the monthly composite sample to determine mercury content of these materials for the month.....

No. 57: M.24.a. PM Emissions Tests (Continuous Emissions Monitors). On & after **9/9/2013,** sources subject to the limitations on emissions of PM, you must install, operate, calibrate, and maintain a PM CEMS in accordance with the requirements in §63.1350(b) . You must determine, record, and maintain a record of the accuracy of the volumetric flow rate monitoring system according to the procedures in **§63.1350(u)**....

No. 58: M.24.b. HCL Emissions Tests. For a source subject to limitations on HCl emissions on and after **9/9/2013**, you must conduct performance testing by the following methods:

(i)(A) (Not Applicable).

(B) (Not Applicable)...

No. 60: M.24.c. THC Emissions Tests (Continuous Emissions Monitors). Before and after 09/09/2013, (A) If you are subject to limitations on THC emissions, you must operate a continuous emissions monitoring system (CEMS) in accordance with the requirements in §63.1350(i). For the purposes of conducting the accuracy and quality assurance evaluations for CEMS, the THC span value (as propane) is 50 ppmvd. You demonstrate compliance with a RATA when the accuracy between the CEMS and the test audit is within 20 percent or when the test audit results are within 10 percent of the standard (B) The initial compliance test must be based on the first 30 operating days of operation in which the affected source operates using a CEMS...

No. 61: M.24.d. Mercury (Hg) Continuous Emissions Monitors. If you are subject to limitations on mercury emissions, you must operate a mercury CEMS in accordance with the requirements of §63.1350(k) on and after **9/9/2013**...

No.62.: M.26. Clinker Production Monitoring Requirements (2010 NESHAPS). On and & after 09/09/13, sources subject to an emissions limitation on particulate matter, mercury, NO_X, or SO_2emissions (lb/ton of clinker), you must:...

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(B) The initial compliance test must be based on the 30 operating days in which the affected source operates using a CEMS. Hourly HCl concentration and stack gas volumetric flow rate data must be obtained.

Permitting Note: Requirement effective on the September 9, 2013 Compliance Date

[40 CFR 63.1349(b)(6)(ii)]

M.24.c. THC Emissions Tests (Continuous Emissions Monitors). Before and after 09/09/2013, (A) If you are subject to limitations on THC emissions, you must operate a continuous emissions monitoring system (CEMS) in accordance with the requirements in §63.1350(i). For the purposes of conducting the accuracy and quality assurance evaluations for CEMS, the THC span value (as propane) is 50 ppmvd. You demonstrate compliance with a RATA when the accuracy between the CEMS and the test audit is within 20 percent or when the test audit results are within 10 percent of the standard (B) The initial compliance test must be based on the first 30 operating days of operation in which the affected source operates using a CEMS....

No. 38: N.2.b. Particulate Matter. Particulate emissions shall not exceed 0.04 lb/ton of dry preheater feed (normal operation); and 0.004 gr/dscf (startup and shutdown)

The compliance date for existing sources for PM emissions that became effective on November 8, 2010 will be September 9, 2013. After September 9, 2013 has passed, the previous limit of **Specific Condition No. N.2. a.** PM emissions no longer applies.

No. 39: N.3. Pollutant Emissions Limits (All EPs). Emissions shall not exceed the following limits for the following pollutants:

POLLUTANT	EP	EMISSION LIMIT		AVERAGING TIME	BASIS
PM- ESP Cooler	2K15	0.06 lb/ton of dry preheater feed; 0.1 lb/ton of clinker	12.5 lb/hour	3 hours [1]	BACT
PM- Baghouse	All, except ESP	0.01 gr/dscf	1.64 lb/hour	3 hours [1]	BACT
PM total	All		14.14 lb/hour		
PM_{10} - ESP	2K15	0.05 lb/ton of dry preheater feed; 0.08 lb/ton of clinker	10.0 lb/hour	3 hours [1]	BACT
PM_{10} - Baghouse	All, except ESP	.007 gr/dscf	1.15 lb/hr	3 hours [1]	BACT
PM_{10} total	All		11.15 lb/hr		
VE	All, except ESP	10% opacity[3]		6 minutes [2]	BACT

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No. 40: D.16 and N.6. Clinker Material Storage and Handling Activities. If clinker material storage and handling activities occur more than 1,000 feet from the facility property-line you must comply with the following:

(1) Utilize a three-sided barrier with roof, provided the open side is covered with a wind fence material of a maximum 20 percent porosity, allowing a removable opening for vehicle access. The removable wind fence for vehicle access may be removed only during minor or routine maintenance activities, the creation or reclamation of outside storage piles, the importation of clinker from outside the facility, and reclamation of plant clean-up materials. The removable opening must be less than 50 percent of the total surface area of the wind fence and the amount of time must be minimized to the extent feasible.

(2) Contain storage and handling of material that is immediately adjacent to the three-sided barrier within an area next to the structure with a wind fence on at least two sides, with at least a 5-foot freeboard above the top of the storage pile to provide wind sheltering, and completely cover the material with an impervious tarp, revealing only the active disturbed portion during material loading and unloading activities.

(3) Storage and handling of other active clinker material must be conducted within an area surrounded on three sides by a barrier or wind fences with one side of the wind fence facing the prevailing wind and at least a 5-foot freeboard above the top of the storage pile to provide wind sheltering. The clinker must remain completely covered at all times with an impervious tarp, revealing only the active disturbed portion during material loading and unloading activities. The barrier or wind fence must extend at least 20 feet beyond the active portion of the material at all times.

(4) Inactive clinker material may be alternatively stored using a continuous and impervious tarp, covered at all times, provided records are kept demonstrating the inactive status of such stored material.

(d) If clinker material storage and handling activities occur 1,000 feet or less from the facility property-line these activities must be in an enclosed storage area that meets the emissions limits specified in §63.1345.

[40 CFR 63.1345(c)-(d)]

No. 41: O.4.Visible Emissions. Visible emissions from each emission point of this emissions unit shall not exceed 5% opacity.

[More stringent BACT; Air Construction Permit No. 0010087-031-AC; 10% opacity 40 CFR 63.1345 subsumed]

No. 42: O.4.Visible Emissions. Visible emissions from each emission point of this emissions unit shall not exceed 5% opacity.

[More stringent BACT; Air Construction Permit No. 0010087-031-AC; 10% opacity 40 CFR 63.1345 subsumed]

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NO. 43: CONTINUOUS COMPLIANCE REQUIREMENTS

O.5.a. Continuous Opacity Compliance (EPs 2M07, 2N91, 2N36, 2Q25 & 2Q26): Prior to 09/08/2013, if you were subject to a limitation on opacity under §63.1348, (2006 NESHAP) you must conduct required emissions monitoring in accordance with §63.1350 paragraphs (a)(4)(i)- (a)(4)(iv)Procedures to be used to periodically monitor affected sources subject to opacity standards under §§63.1346 and 63.1348. Such procedures must include the provisions of paragraphs (a)(4)(i) through (a)(4)(iv) of this section....

NO. 44: O.5.b. Continuous Opacity Compliance (EPs 2M07, 2N91, 2N36, 2Q25 & 2Q26): On and after 9/9/2013, sources subject to a limitation on opacity under §63.1345, (2010 NESHAP) you must conduct required emissions monitoring in accordance with the provisions of paragraphs (f)(1)(i) through (f)(1)(vii) of §63.1350 and in accordance with the operation and maintenance plan developed in accordance with §63.1347. You must also develop an opacity emissions monitoring plan in accordance with paragraphs (o)(1) through (o)(4) and paragraph (o)(5), if applicable, of §63.1350.....

No. 45 O.5.c. Opacity Monitoring Requirements (EPs 2N09 and 2N12). Now and after 09/09/2013, you are subject to a limitation on opacity under §63.1347(2006 & 2010 NESHAP), you must conduct the following required emissions monitoring:

(1)(i) For a raw mill or **finish mill**, you must monitor opacity by conducting daily visual emissions observations of the mill sweep and air separator particulate matter control devices (PMCD) of these affected sources in accordance with the procedures of Method 22 of appendix A–7 to part 60 of 40 CFR 60. The duration of the Method 22 performance test must be 6 minutes....

No. 46: **P.4. Visible Emissions.** Visible emissions from each emission point of this emissions unit shall not exceed 5% opacity.

[Rules 62-4.070(3), 62-210.700(5), 62-212.400 and 62-297.620(4), F.A.C., BACT and Air Construction Permit No. 0010087-031-AC; 10% opacity from 40 CFR 63.1345 is subsumed]

No. 47: **P.8. Opacity Monitoring Requirements (Each EP).** If you are subject to a limitation on opacity under §63.1345, you must conduct required emissions monitoring in accordance with the provisions of paragraphs (f)(1)(i) through (f)(1)(vii) of §63.1350 and in accordance with the operation and maintenance plan developed in accordance with §63.1347. You must conduct emissions monitoring in accordance with paragraphs (f)(2)(i) through (f)(2)(iii) of §63.1350 and in accordance with the operation and maintenance plan developed in accordance with (p)(1) through (p)(4) of §63.1350. You must also develop an opacity emissions monitoring plan in accordance with paragraphs (o)(1) through (o)(4) and paragraph (o)(5), if applicable, of §63.1350...

No. 48: Q.7. Visible Emissions. Visible emissions from each emission point of this emissions unit shall not exceed 5% opacity.

[Rule 62-210.200, F.A.C., Definitions -- potential to emit (PTE); and Permit No. 0010087-031-AC; BACT is more stringent than 20% opacity from 40 CFR 60.254]

No. 49: Added the Three Emergency Engines 40 CFR 63, Subpart ZZZZ requirements:

Emission Unit ID No. 017: Three Emergency Engines

E.U. ID No.	Brief Description
017	Three Emergency Engines Engine No. 1: Power unit for emergency electrical generator for Kiln No. 1, manufactured by Caterpillar. 1108 (bhp) diesel CI, emergency engine. Serial No. 2WJ01811, arrangement No. TE-1091. Engine No. 2: Power unit for emergency electrical generator for Kiln No. 2, manufactured by Caterpillar. 1150 (bhp) diesel CI, emergency engine. Serial No. MJE004171, arrangement No. 2671232. Engine No. 3: Power unit for emergency, centrifugal-type fire pump, manufactured by Clarke Detroit Diesel-Allison, Inc. 83 (bhp) diesel CI, emergency engine. Serial No. 22B05114, arrangement No. TI206.

In accordance with 40 CFR 63.6590(a)(1)(i), Engine No. 1 is an existing stationary RICE at a major source. In accordance with 40 CFR 63.6590(b)(3)(iii), Existing emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions does not have to meet the requirements of this subpart and of subpart A of this part, including initial notification requirements.

In accordance with 40 CFR 63.6590(a)(2)(i), Engine No. 2 is a new stationary RICE at a major source. In accordance with 40 CFR 63.6590(b)(1)(i), The stationary RICE is a new or reconstructed emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions. If you are required to submit an Initial Notification but are otherwise not affected by the requirements of this subpart, in accordance with §63.6590(b), your notification should include the information in §63.9(b)(2)(i) through (v), and a statement that your stationary RICE has no additional requirements and explain the basis of the exclusion (for example, that it operates exclusively as an emergency stationary RICE if it has a site rating of more than 500 brake HP located at a major source of HAP emissions). [40 CFR 63.6645(f)]

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In accordance with 40 CFR 63.6590(a)(1)(i), Engine No. 3 is an existing stationary RICE at a major source. If you have an existing stationary CI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions you must comply with the applicable emission limitations and operating limitations no later than May 3, 2013. [40 CFR 63.6595(a)]

See Combined Appendices, Appendix ICE for all of the engine(s) requirements.

GREENHOUSE GASES

Based on the Greenhouse Gases Emissions Report for year 2010, the facility total CO_2e emissions were 546,311 metric tons.

CONCLUSION

This project renews Title V air operation permit No. 0010087-038-AV, which was issued on January 25, 2007. This Title V air operation permit renewal is issued under the provisions of Chapter 403, Florida Statues (F.S.), and Chapters 62-4, 62-210 and 62-213, F.A.C.