Memorandum

Florida Department of Environmental Protection

TO:

Michael G. Cooke, Director DARM

Through:

Trina L. Vielhauer, Chief BAR

Through:

A.A. Linero, P.E., Program Administrator, South Permitting Section

From:

Cindy Mulkey (21)

DATE:

February 17, 2006

SUBJECT:

Florida Rock Industries, Inc. - Finish Mill Throughput Rate Increase

DEP File No. 0010087-018-AC

Attached is the Final Permit for Florida Rock Industries authorizing an increase in the finish mill throughput from 136 tons per hour of cement to 150 tons per hour at the existing Thompson S. Baker Cement Plant near Newberry in Alachua County.

No emissions limit or production increases were requested by FRI due to this project. No production equipment or control devices will be changed or affected. No changes are requested in the amount of fuel use or raw materials subjected to pyroprocessing in the preheater/calciner, kiln, or clinker cooler. Particulate emissions from the baghouses will remain unchanged and fugitive emissions due to increased truck traffic from the limestone quarry to the limestone/gypsum storage area are estimated to be less than 1 ton per year. Neither a Determination of Best Available Control Technology (BACT) nor an air quality analysis was required for this project.

We issued the draft permit November 14, 2005 and a public notice was made on January 26, 2006 in *The High Springs Herald*. No comments were received for this project.

Accordingly, I recommend your approval.

AAL/cem

Attachments

FINAL DETERMINATION

Florida Rock Industries, Inc.
Thompson S. Baker Cement Plant
Finish Mill Throughput Rate Increase
DEP File No. 0010087-018-AC

On November 14, 2004 the Florida Department of Environmental Protection (Department) distributed an "Intent to Issue Air Construction Permit" to allow an increase in the finish mill throughput rate at the Florida Rock Industries Thompson S. Baker Cement Plant located 2.5 miles Northeast of Newberry on County Road 235 in Alachua County.

The package included the Department's Draft Air Construction Permit, the "Intent to Issue Air Construction Permit," the "Technical Evaluation and Preliminary Determination," and the "Public Notice of Intent to Issue Air Construction Permit". The Department sent copies of the package to various persons, agencies, and municipalities including those who had asked that they be informed of any Department permitting activities related to the subject facility. Florida Rock Industries, Inc. published the Public Notice in *The High Springs Herald* on January 26, 2006 and provided to the Department the required proof of publication.

The Department received no comments or petitions for administrative hearings on the Draft Air Construction Permit. The final action is to issue the Air Construction Permit as drafted.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION NOTICE OF PERMIT

In the Matter of an Application for Permit by:

Mr. Chris Horner, Plant Manager Florida Rock Industries, Inc. 4000 NW CR 235 Post Office Box 459 Newberry, Florida 32669 DEP File No. 0010087-018-AC Thompson S. Baker Cement Plant Alachua County

Enclosed is the Final Permit Number 0010087-018-AC authorizing an increase in the finish mill throughput from 136 tons per hour of cement to 150 tons per hour at the existing Thompson S. Baker Cement Plant near Newberry in Alachua County. This permit is issued pursuant to Chapter 403, Florida Statutes.

Any party to this order (permit) has the right to seek judicial review of the permit pursuant to Section 120.68, F.S., by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Legal Office; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 (thirty) days from the date this Notice is filed with the Clerk of the Department.

Executed in Tallahassee. Florida.

Trina L. Vielhauer, Chief Bureau of Air Regulation

CERTIFICATE OF SERVICE

Chris Homer. FR!*
Henry Gotsch, FR!
John Koogler, P.E. Koogler & Associates
Chair, Alachua County Commission
Chris Bird, Alachua County EMD
John Glanzer, Mayor, City of Newberry
Lowell Garrett, City of Newberry
Jim Little, EPA
Chris Kirts, DEP NED

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to §120.52, Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

/1° X



Department of Environmental Protection

Jeb Bush Governor Twin Towers Office Building 2600 Blair Stone Road Tallahassee, Florida 32399-2400

Colleen M. Castille Secretary

PERMITTEE

Florida Rock Industries 4000 NW CR 235 Post Office Box 459 Newberry, Florida 32669

Permit No. 0010087-018-AC Expires: December 31, 2006 Finish Mill Throughput Rate Increase

PROJECT AND LOCATION

This permit authorizes an increase in the finish mill throughput rate from 136 tons per hour to 150 tons per hour of cement at the existing Thompson S. Baker Cement Plant in Alachua County. The facility is on County Road 235 approximately 2.5 miles northeast of Newberry, Florida. The map coordinates are: UTM Zone 17, 346.8 km East and 3287.0 km North.

STATEMENT OF BASIS

This air pollution construction permit is issued under the provisions of Chapter 403 of the Florida Statutes (F.S.), and Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297 of the Florida Administrative Code (F.A.C.). The permittee is authorized to conduct the work specified in accordance with the conditions of this permit and as described in the application, approved drawings, plans, and other documents on file with the Department. This permit supplements all other air construction and operation permits for the subject emissions unit and does not alter any requirements from such previously issued air permits.

APPENDICES

The following appendices are attached as part of this permit.

Appendix GC - Construction Permit General Conditions

Michael G. Cooke, Director

Division of Air Resources Management

Effective Date:

FACILITY DESCRIPTION

Florida Rock Industries, Inc. (FRI) owns and operates the Thompson S. Baker Cement Plant in Newberry, Alachua County. The facility consists of raw material handling and storage, a raw mill system, kiln system, clinker handling, finish grinding operations, cement handling, loading and bagging operations, and coal handling and grinding operations.

The kiln is presently permitted to produce 2,650 tons per day of clinker, 800,000 tons per year, with a peak hourly clinker production limit of 115 tons per hour. The finish mill is presently permitted at an hourly process rate of 136 tons per hour of cement. (0010087-006-AC).

PROJECT

The project as requested is to increase the finish mill process rate from 136 tons per hour to 150 tons per hour of cement. The following emissions units are affected by this permit.

ID No.	Emission Unit Description		
005	Finish Grinding Operations. Emissions Unit 005 identifies the Finish Grinding Operations. Fabric filters control particulate matter emissions. Emission Points are identified as follows: (EP02) – Clinker to Finish Mill – M-08, (EP03) - Finish Mill Air Separator – N-09, (EP04) – Finish Mill – N-12, (EP05) – Cement Handling in Finish Mill – N-19, (EP06) – Cement Storage Silos – Q-25, (EP07) – Cement Storage Silos – Q-26.		

REGULATORY CLASSIFICATION

Regulatory classification and applicable requirements are listed in the applicable Title V Operation Permit and the previously-issued construction permit.

<u>Title III HAPS</u>: This facility has the potential to emit 10 tons per year or more of any one hazardous air pollutant or 25 tons per year or more of any combination of hazardous air pollutants, and is therefore considered a major source of hazardous air pollutants.

<u>Title V</u>: This facility emits or has the potential to emit more than 100 tons per year of carbon monoxide (CO), and nitrogen oxides (NO_X) and is therefore a Title V major source of air pollutants.

<u>PSD</u>: The project is located in an area designated as "attainment", "maintenance", or "unclassifiable" for each pollutant subject to a National Ambient Air Quality Standard. The facility is considered a "portland cement plant", which is one of the 28 Prevention of Significant Deterioration (PSD) source categories with the lower PSD applicability threshold of 100 tons per year. Potential emissions of at least one regulated pollutant exceed 100 tons per year. Therefore, the facility is classified as a PSD-major source of air pollution with respect to Rule 62-212,400 F.A.C., PSD.

NSPS: This facility is subject to 40 CFR 60, Subpart OOO (New Source Performance Standards For Nonmetallic Mineral Processing Plants) adopted and incorporated by reference in Rule 62-204.800, F.A.C.

This facility is subject to 40 CFR 60, Subparts A. F and Y (Standards of Performance for New Stationary Sources – General Provisions, Standards of Performance for Portland Cement Plants and Standards of Performance for Coal Preparation Plants) adopted and incorporated by reference in Rule 62-204.800, F.A.C. Certain requirements from Subpart F are replaced by requirements from 40 CFR 63, Subpart LLL.

<u>NESHAP</u>: This facility is subject to the "Existing Major Source" provisions of 40 CFR 63 Subparts A and LLL (National Emission Standards for Hazardous Air Pollutants – General Provisions; and National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry).

SECTION I. FACILITY INFORMATION

RELEVANT DOCUMENTS

- Original Air Construction Permit AC01-267311 (renumbered 0010087-001-AC) issued in December 1996 (as amended in August 2001). Also known as PSD-FL-228;
- Current Title V Operation Permit 0010087-002-AV issued January 11, 2002;
- Construction Permit modification (PSD -FL-228C and 0010087-006-AC) issued on December 11, 2002;
- Application submitted by Florida Rock, received July 29, 2005;
- Department's Request for Additional Information, dated August 26, 2005;
- Response to Request for Additional Information submitted by Koogler & Associates, received September 2, 2005; and
- Department's Technical Evaluation and Final Determination dated November 14, 2005.

SECTION II. ADMINISTRATIVE REQUIREMENTS

GENERAL AND ADMINISTRATIVE REQUIREMENTS

- 1. <u>Permitting Authority</u>: All documents related to applications for permits to construct, modify or operate this emissions unit shall be submitted to the Bureau of Air Regulation (BAR), Florida Department of Environmental Protection ("Department"), at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400 and phone number 850/488-0114. Copies of these documents shall be submitted to the Compliance Authority.
- 2. <u>Compliance Authority</u>: All-documents related to compliance activities such as reports, tests, and notifications should be submitted to the Northeast District Office at 7825 Baymeadows Way, Suite 200B, Jacksonville, Florida 32256-7590. The phone number is 904/807-3300 and the fax number is 904/448-4363.
- 3. <u>General Conditions</u>: The owner and operator are subject to, and shall operate under, the attached General Conditions listed in *Appendix GC* of this permit. General Conditions are binding and enforceable pursuant to Chapter 403, F.S. [Rule 62-4.160, F.A.C.]
- 4. Applicable Regulations. Forms and Application Procedures: Unless otherwise indicated in this permit, the construction and operation of this project shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of: Chapter 403, F.S.; and Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296, and 62-297, F.A.C. The permittee shall use the applicable forms listed in Rule 62-210,900, F.A.C. and follow the application procedures in Chapter 62-4. F.A.C. Issuance of this permit does not relieve the facility owner or operator from compliance with any applicable federal, state, or local permitting or regulations. [Rules 62-204.800, 62-210.300 and 62-210.900, F.A.C.]
- 5. <u>Permit Expiration</u>: For good cause, the permittee may request that this air construction permit be extended. Such a request shall be submitted to the Department's Bureau of Air Regulation at least sixty (60) days prior to the expiration of this permit. [Rules 62-4.070(4), 62-4.080, and 62-210.300(1), F.A.C.]
- 6. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]
- 7. <u>Modifications</u>: No emissions unit or facility subject to this permit shall be constructed or modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification. [Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]
- 8. <u>Title V Permit</u>: This permit authorizes construction of the proposed project and initial operation to determine compliance with Department rules. Upon completion of construction of this project, a Title V operation permit revision is required for regular operation of the new equipment. The permittee shall apply for a revised Title V operation permit prior to expiration of this permit. To apply for a Title V operation permit, the applicant shall submit the appropriate application form, compliance test results, and such additional information as the Department may by law require. [Rules 62-4.030, 62-4.050, 62-4.220, and Chapter 62-213, F.A.C.]

SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS

EU 003. KILN SYSTEM

This section of the permit addresses the following emissions unit:

ID No.	Emission Unit Description
005	Finish Grinding Operations. Emissions Unit 005 identifies the Finish Grinding Operations. Fabric filters control particulate matter emissions. Emission Points are identified as follows: (EP02) – Clinker to Finish Mill – M-08, (EP03) - Finish Mill Air Separator – N-09, (EP04) – Finish Mill – N-12, (EP05) – Cement Handling in Finish Mill – N-19, (EP06) – Cement Storage Silos – Q-25, (EP07) – Cement Storage Silos – Q-26.

ADMINISTRATIVE REQUIREMENTS

<u>Previous Permit Conditions</u>: This permit authorizes an increase in the finish mill process rate from 136 tons per hour to 150 tons per hour of cement. The following conditions are in addition to or replace those of the previous air construction permits. Unless otherwise specified, the emissions unit remains subject to all applicable conditions from previous air construction permits. [Rule 62-4.070(3), F.A.C.]

CONSTRUCTION ACTIVITIES

<u>Finish Mill Process Rate Increase</u>: No physical construction activities will be conducted in association with an increase in the finish mill process rate. [Application]

CONSTRUCTION PERMIT GENERAL CONDITIONS [Rule 62-4.160, F.A.C.]

- G.1 The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
- G.2 This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings or exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
- G.3 As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey and vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.
- G.4 This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
- G.5 This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.
- G.6 The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.
- G.7 The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:
 - (a) Have access to and copy and records that must be kept under the conditions of the permit:
 - (b) Inspect the facility, equipment, practices, or operations regulated or required under this permit, and,
 - (c) Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

Reasonable time may depend on the nature of the concern being investigated.

- G.8 If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:
 - (a) A description of and cause of non-compliance; and
 - (b) The period of noncompliance, including dates and times: or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

APPENDIX GC

CONSTRUCTION PERMIT GENERAL CONDITIONS [RULE 62-4.160, F.A.C.]

- The permittee shall be responsible for any and all damages, which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.
- G.9 In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, Florida Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.
- G.10 The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.
- G.11 This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 62-4.120 and 62-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.
- G.12 This permit or a copy thereof shall be kept at the work site of the permitted activity.
- G.13 This permit also constitutes:
 - (a) Determination of Best Available Control Technology (not applicable to project):
 - (b) Determination of Prevention of Significant Deterioration (not applicable to project); and
 - (c) Compliance with New Source Performance Standards (not applicable to project).
- G.14 The permittee shall comply with the following:
 - (a) Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
 - (b) The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application or this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
 - (c) Records of monitoring information shall include:
 - 1. The date, exact place, and time of sampling or measurements:
 - 2. The person responsible for performing the sampling or measurements:
 - 3. The dates analyses were performed;
 - 4. The person responsible for performing the analyses;
 - 5. The analytical techniques or methods used; and
 - 6. The results of such analyses.
- G.15 When requested by the Department, the permittee shall within a reasonable time furnish any information required by law, which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

TABLE II

	ALLOWABLE EMISSIONS		
Stack #	Description	Grain Loading	OPACITY
	Emission Unit 1: Raw Material Process Rate = 1.331.000 TPY Dry Feed		
Fugitive	Material Processing		10
Fugitive	Handling and Storage		10
Fugitive	Crusher		15
	Emission Unit 2: Raw Mill System Process Rate = 255 TPH Recycle Dust plus Raw Meal (peak)		
E-28	Recycle dust + raw meal to homogenization silo	0.01 gr/dscf	5
G-07	Recycle dust + raw meal to homogenization silo	0 01 gr/dscf	5
H-08	Raw meal + recycle dust to preheater	0.01 gr/dscf	5
	Emission Unit 3. Kiln System Process Rate = 364 MMBTU/hr heat input		
E-21	Kiln Operations (ESP)		10
E-21	In-process fuel. coal		10
E-21	In-process fuel: petroleum coke		10
E-21	In-process fuel: fly ash		10
E-21	In-process fuel, natural gas		
E-21	In-process fuel: tires		10
	Petroleum coke (25% of total heat input), tires (30% of total heat input), fly ash (5% of total heat input)		
	Emission Unit 4 Clinker Handling 115 TPH Clinker (peak)		
L-03	Clinker Cooler Discharge and Breaker	0.01 gr. dscf	5
L-06	Clinker into Clinker Silos	0.01 gr.dscf	5
K-15	Clinker Cooler (ESP)		10
	Emission Unit 5: Finish Grinding Operations Process Rate = 150 TPH Cement		
M-08	Clinker to Finish Mill	0.01 gr/dscf	5
N-09	Finish Mill Air Separator	0.01 gr/dsef	5.
N-12	Finish Mill	0.01 gr/dscf	5.
N-19	Cement Handling in Finish Mill	0.01 gr/dscf	5
Q-25	Cement Storage Silos	0.01 gr/dscf	5
Q-26	Cement Storage Silos	0.01 gr/dscf	5
	Emission Unit 6 Cement Handling Process Rate = 500 TPH Cement Unloading		
Q-14	Cement Silo Load-out	0.01 gr/dscf	5
Q-17	Cement Silo Load-out	0.01 gr/dscf	5
Q-21	Cement Silo Load-out	0.01 gr/dscf	5
R-12	Cement Bagging Operation	0.01 gr/dsef	5
	Emission Unit 7 Coal Handling and Grinding Process Rate = 14 TPH Pulverized Coal, Petroleum Coke, and Fly Ash		
S-17	Coal and Petroleum Coke Mill	0.01 gr/dscf	5
S-21	Pulverized Coal and Petroleum Coke, and Fly Ash Storage Bin	0.01 gr/dscf	5
Fugitive	Coal, Petroleum Coke, Fly Ash Handling and Storage		5/20

 Complete items 1, 2, a item 4 if Restricted De Print your name and a so that we can return Attach this card to the or on the front if space 	elivery is desired. ddress on the reverse the card to you. back of the mailpiece,	A. Signature A. Signature A. Signature A. Agent Addree B. Received by (Printed Name) C. Date of Del D. Is delivery address different from item 1? Yes	
Mr Chris Horner Florida Rock Industries, Inc. 4000 NW CR 235 Post Office Box 459 Newberry, Florida 32669		If YES, enter delivery address below: No	
		3. Service Type Certified Mail Registered Return Receipt for Mercha Insured Mail C.O.D.	
i		4. Restricted Delivery? (Extra Fee)	

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2000 1670	Mr. Chris Horner Florida Rock Industries, 4000 NW CR 235 Post Office Box 459 Newberry, Florida 32669		
ı	PS Form 3800, May 2000	See Reverse for Instructions	