

OERTEL, HOFFMAN, FERNANDEZ & COLE, P.A.

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TALLAHASSEE, FLORIDA 32301

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PATRICIA A. RENOVITCH

PAUL A. LEHRMAN
OF COUNSEL

October 22, 2001

VIA HAND DELIVERY

Jack Chisolm, Deputy General Counsel
Office of General Counsel
Florida Department of Environmental Protection
3900 Commonwealth Blvd.
Tallahassee, FL 32399-3000

Re: CSR Rinker Materials Corporation
DEP File No. 020014-007-AC
Miami Cement Plant
Notice of Permitting Determination

Dear Jack:

We represent CSR Rinker Materials Corporation with respect to the above-referenced matter. The company received the Department's Notice of Permitting Determination, dated September 28, 2001, on October 1, 2001. A copy of the Department's Notice is attached hereto as Exhibit A. The point of entry to Administrative Proceedings set forth on page 2 of 3 of Exhibit A provides that any petition must be filed with the Department within fourteen (14) days of receipt of the Notice.

CSR Rinker Materials Corporation is desirous of continuing discussions with Department staff on the subject of the Notice. The Company requested an extension of time, to October 29, 2001, by letter dated October 5, 2001. On Thursday, October 18, representatives of the Company met with the Department's Air Permitting staff in Tallahassee, and agreed on certain actions to resolve all pending issues. However, additional time is needed to implement these matters. Company representatives and the Department staff agreed that a further extension of time would be desirable. Accordingly, an extension of time in which to file a petition for hearing, should filing a petition be necessary, is both desirable and reasonable.

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DEP File No. 020014-007-AC
Miami Cement Plant
Notice of Permitting Determination

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CSR Rinker Materials Corporation is desirous of continuing discussions with Department staff on the subject of the Notice. The Company requested an extension of time, to October 29, 2001, by letter dated October 5, 2001. On Thursday, October 18, representatives of the Company met with the Department's Air Permitting staff in Tallahassee, and agreed on certain actions to resolve all pending issues. However, additional time is needed to implement these matters. Company representatives and the Department staff agreed that a further extension of time would be desirable. Accordingly, an extension of time in which to file a petition for hearing, should filing a petition be necessary, is both desirable and reasonable.

Jack Chisolm, Deputy General Counsel
October 22, 2001
Page 2

Pursuant to Rule 28-106.111, Florida Administrative Code, we hereby file this request for an extension of time to file a petition for administrative hearing with respect to the Notice of Permitting Determination dated September 28, 2001, and attached hereto Exhibit A, up to and including Friday, December 28, 2001. As stated above, an additional time request was discussed and agreed to by Mr. Scott Benyon and Mr. Mike Vardamann of Rinker and Mr. Al Linero and Mr. Clair Fancy of DEP.

Thank you for your consideration of this matter. If you have any questions, please feel free call us.

Sincerely,



Segundo J. Fernandez
Timothy P. Atkinson

c: Howard Rhodes
C.H. Fancy, P.E.
A. A. Linero, P.E.
Stacey Cowley
Sharon DeHays
Mike Vardamann
Scott Benyon
John Koogler, Ph.D., P.E.



Jeb Bush
Governor

Department of Environmental Protection

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

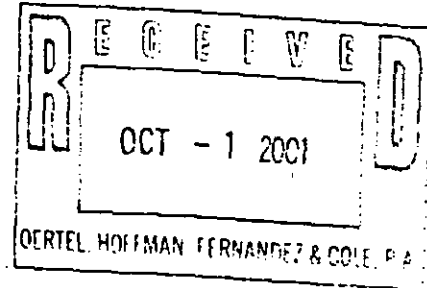
David B. Struhs
Secretary

September 28, 2001

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Ms. Sharon DeHays, V.P Cement Operations
CSR Rinker Materials Corporation
1200 Northwest 137th Avenue
Miami, Florida 33182

Re: DEP File No. 0250014-007-AC
Miami Cement Plant



Dear Ms. DeHays:

Enclosed is one copy of the Draft Air Construction Permit Modification for the Miami Cement Plant. The Department's Technical Evaluation, Intent to Issue Air Construction Permit Modification, and the "Public Notice of Intent to Issue Air Construction Permit Modification" are also included.

The "Public Notice" must be published one time only as soon as possible in a newspaper of general circulation in the area affected, pursuant to the requirements Chapter 50, Florida Statutes. Proof of Publication, i.e. newspaper affidavit, must be provided to the Department's Bureau of Air Regulation office within seven days of publication. Failure to publish the notice and provide proof of publication within the allotted time may result in denial of the permit modification. The Department reserves the right to publish the Public Notice at anytime. If the Department publishes the Public Notice, the applicant is relieved of this responsibility.

Please submit any written comments you wish to have considered concerning the Department's proposed action to A.A. Linero, P.E. Administrator, New Source Review Section at the letterhead address or contact him at 850/921-9523.

Sincerely,

C.H. Fancy, P.E., Chief
Bureau of Air Regulation

CHF/al

Enclosures

Exhibit "A"

"More Protection, Less Process"

Printed on recycled paper.

In the Matter of an
Application for Permit by:

CSR Rinker Materials Corporation
1200 Northwest 137th Avenue
Miami, Florida 33182

DEP File No. 0250014-007-AC
Extension and Modification of Construction Permit
Miami Cement Plant
Miami-Dade County

INTENT TO ISSUE AIR CONSTRUCTION PERMIT MODIFICATION

The Department of Environmental Protection (Department) gives notice of its intent to issue an air construction permit modification (copy of DRAFT Permit Modification attached) for the proposed action, detailed in the application specified above and the attached Draft Control Technology Review, for the reasons stated below.

The applicant, CSR Rinker Materials Corporation, applied by letter dated September 7, 2000 to the Department to extend the expiration date of its current permit to construct (modernize) the Miami Cement Plant in Miami-Dade County. The primary purposes were to allow additional time to complete testing, to design and install a tire handling and burning system, and to add equipment to reduce operational problems (scale formation) within the kiln. Rinker subsequently modified its request to remove the beryllium limit, express certain emission limitations using industry conventions, and to provide reasonable assurance of compliance with the volatile organic emissions standards.

The Department has permitting jurisdiction under the provisions of Chapter 403, Florida Statutes (F.S.), and Chapters 62-4, 62-210, and 62-212 of the Florida Administrative Code (F.A.C.). The above actions are not exempt from permitting procedures. The Department has determined that an air construction permit modification is required to extend the expiration date of the permit and to include a final limit for sulfuric acid mist emissions.

The Department intends to issue this air construction permit based on the belief that the applicant has provided reasonable assurances to indicate that operation of these emission units will not adversely impact air quality, and the emission units will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296, and 62-297, F.A.C. In addition, the proposed modifications have been included in the Northeast District's DRAFT Title V Air Operation Permit; and, the Public Notice is a combined notice and addresses the Intent to Issue this proposed permitting action and the Northeast District's Title V Air Operation Permit simultaneously.

Pursuant to Section 403.815, F.S., and Rule 62-110.106(7)(a)1., F.A.C., you (the applicant) are required to publish at your own expense the enclosed Public Notice of Intent to Issue Air Construction Permit Modification. The notice shall be published as soon as possible one time only in the legal advertisement section of a newspaper of general circulation in the area affected. Rule 62-110.106(7)(b), F.A.C., requires that the applicant cause the notice to be published as soon as possible after notification by the Department of its intended action. For the purpose of these rules, "publication in a newspaper of general circulation in the area affected" means publication in a newspaper meeting the requirements of Sections 50.011 and 50.031, F.S., in the county where the activity is to take place. If you are uncertain that a newspaper meets these requirements, please contact the Department at the address or telephone number listed below. The applicant shall provide proof of publication to the Department's Bureau of Air Regulation, at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, Florida 32399-2400 (Telephone: 850/488-0114; Fax 850/922-6979). You must provide proof of publication within seven days of publication, pursuant to Rule 62-110.106(5), F.A.C. No permitting action for which published notice is required shall be granted until proof of publication of notice is made by furnishing a uniform affidavit in substantially the form prescribed in Section 50.051, F.S. to the office of the Department issuing the permit. Failure to publish the notice and provide proof of publication may result in denial of the permit pursuant to Rules 62-110.106(9) & (11), F.A.C.

The Department will issue the final permit modification with the attached conditions unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

The Department will accept written comments concerning the proposed permit issuance action for a period of 14 (fourteen) days from the date of publication of Public Notice of Intent to Issue Air Permit Modification. Written comments should be provided to the Department's Bureau of Air Regulation at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, FL 32399-2400. Any written comments filed shall be made available for public inspection. If

written comments received result in a significant change in the proposed agency action, the Department shall revise the proposed permit modification and require, if applicable, another Public Notice.

The Department will issue the permit modification with the attached conditions unless a timely petition for an administrative hearing is filed pursuant to sections 120.569 and 120.57 F.S., before the deadline for filing a petition. The procedures for petitioning for a hearing are set forth below.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative proceeding (hearing) under sections 120.569 and 120.57 of the Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida, 32399-3000. Petitions filed by the permit applicant or any of the parties listed below must be filed within fourteen days of receipt of this notice of intent. Petitions filed by any persons other than those entitled to written notice under section 120.60(3) of the Florida Statutes must be filed within fourteen days of publication of the public notice or within fourteen days of receipt of this notice of intent, whichever occurs first. Under section 120.60(3), however, any person who asked the Department for notice of agency action may file a petition within fourteen days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under sections 120.569 and 120.57 F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205 of the Florida Administrative Code.

A petition that disputes the material facts on which the Department's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner, the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of how and when petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and (g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take with respect to the agency's proposed action.

A petition that does not dispute the material facts upon which the Department's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any such final decision of the Department on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

In addition to the above, a person subject to regulation has a right to apply for a variance from or waiver of the requirements of particular rules, on certain conditions, under Section 120.542 F.S. The relief provided by this state statute applies only to state rules, not statutes, and not to any federal regulatory requirements. Mediation is not available in this proceeding. Applying for a variance or waiver does not substitute or extend the time for filing a petition for an administrative hearing or exercising any other right that a person may have in relation to the action proposed in this notice of intent.

The application for a variance or waiver is made by filing a petition with the Office of General Counsel of the Department, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. The petition must specify the following information: (a) The name, address, and telephone number of the petitioner; (b) The name,

address, and telephone number of the attorney or qualified representative of the petitioner, if any; (c) Each rule or portion of a rule from which a variance or waiver is requested; (d) The citation to the statute underlying (implemented by) the rule identified in (c) above; (e) The type of action requested; (f) The specific facts that would justify a variance or waiver for the petitioner; (g) The reason why the variance or waiver would serve the purposes of the underlying statute (implemented by the rule); and (h) A statement whether the variance or waiver is permanent or temporary and, if temporary, a statement of the dates showing the duration of the variance or waiver requested.

The Department will grant a variance or waiver when the petition demonstrates both that the application of the rule would create a substantial hardship or violate principles of fairness, as each of those terms is defined in Section 120.542(2) F.S., and that the purpose of the underlying statute will be or has been achieved by other means by the petitioner.

Persons subject to regulation pursuant to any federally delegated or approved air program should be aware that Florida is specifically not authorized to issue variances or waivers from any requirements of any such federally delegated or approved program. The requirements of the program remain fully enforceable by the Administrator of the EPA and by any person under the Clean Air Act unless and until the Administrator separately approves any variance or waiver in accordance with the procedures of the federal program.

Executed in Tallahassee, Florida.


for C. H. Fancy, P.E., Chief
Bureau of Air Regulation

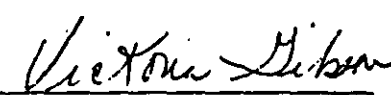
CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this INTENT TO ISSUE AIR CONSTRUCTION PERMIT MODIFICATION (including the PUBLIC NOTICE, Technical Evaluation and Preliminary Determination, and the DRAFT permit modification) was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on 9/28/01 to the person(s) listed:

Sharon DeHays, VP, Rinker*
Mike Vardeman, Rinker
Gregg Worley, EPA
John Bunyak, NPS
Isidore Goldman, DEP SED
H. Patrick Wong, Miami-Dade DERM
John Koogler, PhD., P.E., K&A
Martha Nebelsiek, Esq., DEP OGC
Segundo J. Fernandez, Esq., OHF&C ✓

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.


Victoria Gibson 9/28/01
(Clerk) (Date)

PUBLIC NOTICE OF INTENT TO ISSUE AIR CONSTRUCTION PERMIT MODIFICATION

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

DEP File No. 0250014-007-AC

CSR Rinker Materials Corporation
Miami Cement Plant

Miami-Dade County

The Department of Environmental Protection (Department) gives notice of its intent to issue an air construction permit modification to CSR Rinker Materials Corporation (Rinker). A Best Available Control Technology (BACT) determination and a review for the Prevention of Significant Deterioration (PSD) were not required pursuant to Rule 62-212.400, F.A.C. The applicant's name and address are CSR Rinker Materials Corporation, 1200 Northwest 137th Avenue, Miami, Florida 33182.

The change requiring this public notice is the removal, at Rinker's request, of the beryllium limit included in the original permit issued in September 1997. The federal PSD program no longer requires regulation of beryllium. Beryllium is now regulated under industry-specific Maximum Achievable Control Technology (MACT) regulations for Hazardous Air Pollutants. The Cement Industry MACT regulates of beryllium only for cement kilns that (unlike Rinker) burn hazardous waste.

Additional changes in the modified permit include: a condition to reflect addition of equipment to reduce operational problems (scale formation) within the kiln; expression of certain emission limitations using industry conventions; adoption of additional conditions to provide reasonable assurance of compliance with the volatile organic emissions standards; and modification of conditions to remove presently permitted solid waste fuels that will not actually be burned without further additional modification of the pyroprocessing system.

The Department will issue the FINAL permit modification with the attached conditions unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

The Department will accept written comments concerning the proposed permit issuance action for a period of fourteen (14) days from the date of publication of "Public Notice of Intent to Issue Air Construction Permit Modification." Written comments should be provided to the Department's Bureau of Air Regulation at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, FL 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in the proposed agency action, the Department shall revise the proposed permit and require, if applicable, another Public Notice.

The Department will issue the permit with the attached conditions unless a timely petition for an administrative hearing is filed pursuant to Sections 120.569 and 120.57 F.S., before the deadline for filing a petition. The procedures for petitioning for a hearing are set forth below. Mediation is not available in this proceeding.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative proceeding (hearing) under sections 120.569 and 120.57 of the Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station # 35, Tallahassee, Florida, 32399-3000. Petitions filed by the permit applicant or any of the parties listed below must be filed within fourteen days of receipt of this notice of intent. Petitions filed by any persons other than those entitled to written notice under section 120.60(3) of the Florida Statutes must be filed within

fourteen days of publication of the public notice or within fourteen days of receipt of this notice of intent, whichever occurs first. Under section 120.60(3), however, any person who asked the Department for notice of agency action may file a petition within fourteen days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under sections 120.569 and 120.57 F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205 of the Florida Administrative Code.

A petition that disputes the material facts on which the Department's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner, the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of how and when petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate; (e) A concise statement of the ultimate facts alleged, as well as the rules and statutes which entitle the petitioner to relief; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and (g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take with respect to the agency's proposed action.

A petition that does not dispute the material facts upon which the Department's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any such final decision of the Department on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

A complete project file is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at:

Dept. of Environmental Protection
Bureau of Air Regulation
111 S. Magnolia Drive, Suite 4
Tallahassee, Florida, 32301
Telephone: (850) 488-0114
Fax: (850) 922-6979

Dept. of Environmental Protection
Southeast District Office
400 North Congress Avenue
West Palm Beach, Florida 33401
Telephone: 407/681-6600
Fax: 407/681-6755

Miami-Dade County Department of
Environmental Resources Management
33 Southwest 2nd Avenue, Suite 900
Miami, Florida 33150-1540
Telephone: 305/372-6925
Fax: 305/372-6954

The complete project file includes the application, technical evaluations, Draft Permit, and the information submitted by the responsible official, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Administrator, New Resource Review Section at 111 South Magnolia Drive, Suite 4, Tallahassee, Florida 32301, or call 850/488-0114, for additional information.

DRAFT

Month Date, 2001

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Ms. Sharon DeHays
Vice President of Cement Operations
CSR Rinker Materials Corporation
1200 Northwest 137th Avenue
Miami, Florida 33182

Re: DEP File No. 0250014-007-AC
Modernization Project/Permit Extension

Dear Ms. DeHays:

This is pursuant to your air construction permit extension request dated September 7, 2000 as well as additional requests consolidated in the letter from Koogler and Associates dated June 14, 2001. Per the letter dated June 28 from Oertel-Hoffman, Rinker requested that the Department enter a time extension for taking action on the mentioned requests until September 30. The initial action was taken by issuance of an Intent to Issue a Construction Permit Modification dated September 28, 2001.

As of this time, the plant has been built and produces cement. It has been tested while burning certain fuels, but not while combusting any solid wastes. No equipment was installed for the introduction of such wastes into the kiln. A project is underway to add a bypass to reduce operational problems related to elevated recirculating chemical species that ultimately cause deposits on key surfaces within the pyroprocessing system. We understand that, per Rinker, that the plant can operate the bypass without the need for changes in the permitted heat input and emission rates.

Details of the rationale for the following changes are given in the Department's Technical Evaluation and Preliminary Determination dated September 28 as well as the enclosed final determination accompanying this letter.

EXPIRATION DATE

The expiration date is hereby extended until March 31, 2002. All physical construction required to make cement and to conduct initial testing is complete. This permit modification authorizes further work only for addition of continuous emission monitoring equipment and installation of the bypass system.

SUBSECTION A. COMMON CONDITIONS: 40 CFR 60 NEW SOURCE REVIEW STANDARDS

- ~~40 CFR 60, Subpart Eb, Standards of Performance for Municipal Waste Combustors for Which Construction is Commenced After September 20, 1994. (Co-fired combustor reporting requirements only)~~

SUBSECTION B. SPECIFIC CONDITIONS:

EMISSION LIMITATIONS

- B.1** The maximum allowable emission rates for the kiln, clinker cooler, raw mill, and preheater/precalciner shall not exceed the limits listed in Revised Table 1-2, Air Pollutant Standards and Terms (attached).
[Rule 62-210.200, F.A.C. (Definitions - Potential Emissions)]
- B.5** Fuel Combustion
- (1) Fuels fired in the pyroprocessing system (kiln and precalciner) shall not exceed a total heat input rate of 437 MMBtu/hr and shall consist only of:

- a. Bituminous coal, natural gas, petroleum coke, propane, No. 2 fuel oil, residual fuel oil, on-specification and off-specification used oil.
- b. ~~Whole tires and tire derived fuel (up to 40% total heat input) may be used as a supplemental fuel, but not as a start-up fuel.~~
- c. ~~Combustion of non-hazardous solid waste, oil filters, booms and rags from spill clean up, generated on site. This non-hazardous solid waste material shall be used as supplemental fuel not as a start-up fuel.~~
- d. ~~Combustion of non-hazardous solid waste (up to 10% of total heat input may be used as supplemental fuel: unused diapers, papers products, non-chlorinated plastic waste, sewage sludge from publicly owned treatment works (POTW). This non-hazardous solid waste material shall be not be used as a start-up fuel.~~
- e. ~~The combined percent heat input from tires, tire-derived fuel and solid waste shall not exceed 40 percent of the total heat input from all fuels on a 24-hour basis.~~

COAL AND PETROLEUM COKE

- (2) The coal usage rate shall not exceed 16.8 TPH based on a 24-hour average. The petroleum coke usage rate shall not exceed 14.6 TPH on a 24 hour basis.

TIRES

- (3) ~~Whole tires and tire derived fuel along with the permitted non-hazardous solid waste material may be fed continuously at the kiln inlet at the base of the precalciner at a rate not to exceed 174.8 MMBtu/hr (40% of total kiln and precalciner fuel input) on a 24-hour basis.~~
- (4) ~~Before initiating tire firing, the gases exiting the kiln shall reach a minimum temperature of 1400 degrees F for one hour and the oxygen level in the kiln, as measured at the cement plant induced draft fan, shall reach at least 3 percent (1-hour average). Upon reaching steady state conditions, and within 6 hours, gases exiting the kiln shall be maintained at an outlet temperature of at least 1750 degrees F.~~

CONTINUOUS EMISSIONS MONITORING SYSTEM (CEMS)

- B.10 A continuous emissions monitoring system (CEMS) shall be installed, calibrated, maintained, operated, and used to determine compliance with the emissions limits for NO_x and SO₂ in Revised Table 1-2. CEMS shall be installed and certified, before the initial performance test, and operated in compliance with 40 CFR 60, Appendix F, Quality Assurance Procedures (1996 version) or other Department-approved QA plan; 40 CFR 60, Appendix B, Performance Specification 1, 2, and 3 (1996 version).
[Rules 62-4.070 (3) and 62-204.800, F.A.C.]

By March 31, 2002, permittee shall install, calibrate, maintain and operate a continuous emission monitoring system in the kiln/raw mill stack to measure and record the emissions of VOC from the kiln/raw mill. The CEM system shall be installed, certified, operated and maintained in accordance with Performance Specification 8A of Appendix B of 40 CFR 60. The CEM system's data shall be quality assured using the procedures of Appendix F of 40 CFR 60. The owner or operator shall report no later than the 10th day following each calendar quarter a summary of the 30-day rolling average VOC emissions for the days of that calendar quarter to the Miami-Dade County Department of Environmental Resources Management Office. These results should be reported as pounds per hour of VOC as propane, and pounds of VOC as propane per ton of clinker. [Rule 62-4.070, F.A.C.]

- B.13 For emissions other than NO_x and SO₂, compliance with the allowable emission limiting standards listed in Revised Table 1-2 shall be determined by using the following reference methods as described in 40 CFR 60, Appendix A (1996, version) and 40 CFR 61 Appendix B (1996, version) adopted by reference in Chapter 62-204, F.A.C.

- | | |
|----------|---|
| Method 5 | Determination of Particulate Matter Emissions from Stationary Sources (I) and (A). |
| Method 8 | Determination of Sulfuric Acid Mist from Stationary Sources (I). |
| Method 9 | Visual Determination of the Opacity of Emissions from Stationary Sources (I) and (A). |

Method 10 Determination of Carbon Monoxide Emissions from Stationary Sources (I) and (A).

Method 25 or 25A Determination of Volatile Organic Compound Emissions from Stationary Sources (I) and (A).

Method 29 Determination of Lead, Beryllium, and Mercury from Stationary Sources (I).

Emission testing shall be performed at the kiln/cooler main stack during a period when the kiln precalciner, cooler, raw mill and preheater are operating simultaneously and under normal operating conditions. EPA-reference methods for sampling pollutants shall be as specified in 40 CFR 60, Appendix A. Prior to any emission testing to demonstrate compliance with any emission limit, the permittee shall determine the clinker production rate for the test according to a factor based on the preheater/precalciner feed rate and notify the appropriate local compliance agency in advance of the commencement of any test(s). That rate of clinker production shall be used to determine compliance with all clinker-based emission limits in the permit for that test.

These emission units shall comply with all applicable requirements of Rule 62-297.310, F.A.C. General Test Requirements and 40 CFR 60.8. Performance Tests. Revised Table 2-1, Compliance Requirements (attached) also lists the EPA methods.

Testing of emissions shall be conducted with the emission unit operating at capacity and under the different permitted fuels scenarios (petroleum coke, coal, on or off specification used oil, TDF, solid waste, etc.) as specified in Specific Condition No. B.5. Fuel Combustion. The permittee shall provide DERM with a *protocol* that will outline the different fuel scenarios (% of total heat input) that this unit will be burning. Rinker shall obtain the test data necessary to determine whether this kiln is capable of accommodating the burning of coal or petroleum coke and all of the other supplemental fuels specified on Specific Condition B.5. Fuel Combustion. The fuel scenarios tested shall represent the actual combustion percentage (% of total heat input) that is going to be maintained while burning supplemental fuels during normal operation. The frequency of testing shall be determined by DERM.

Permitted capacity is defined as 90-100% of the maximum operating rate allowed by the permit. If it is impracticable to test at permitted capacity, then the unit may be tested at less than 90% of the maximum operating rate allowed by the permit; in this case, subsequent source operation is limited to 110% of the test load until a new test is conducted. Once the unit is so limited, then operation at higher capacities is allowed for no more than fifteen consecutive days for the purpose of additional compliance testing to regain the permitted capacity in the permit. [Rules 62-204.800, 62-297.310, 62-297.400, 62-297.401, F.A.C., and 40 CFR 60 Appendix A and 40 CFR 60.8, Subpart A].

~~B.20 In order to document compliance with Specific Condition No. B5(3) Tires:~~

- ~~(1) A log shall be established and maintained for the hours of operation using tires as supplemental fuel. The log shall include the daily tire usage (hours) as supplemental fuel at the facility, a monthly running total of the tire usage (hours), and a cumulative 12 month running total (hours), to ensure that the annual limit is not exceeded.~~
- ~~(2) A log shall be maintained that includes the date of all tire deliveries to the facility, and the total quantity (nearest 0.1 tons) of tires received.~~
- ~~(3) A tire usage control system shall be installed to assure that the tire usage as supplemental fuel at the facility does not exceed the maximum of 178.4 million Btu heat input to the kiln and precalciner or 6.7 tons per hour. The control system shall include a verification method and a log that insures and documents that the tires usage and heat input limits are not exceeded.~~
- ~~(4) A log for the utilization rate (tons per hour) of tires shall be maintained. The utilization rate of tires as supplemental fuel shall be determined by a continuous weighing method and shall be recorded.~~
- ~~(5) All logs shall be maintained on file for at least five (5) years and shall be made available to the Department upon request.~~

B.26 This facility shall maintain a central file containing all measurements, records, and other data that are required to be collected pursuant to the various specific conditions of this permit. Operators shall keep a daily Operation and Maintenance log to include, at a minimum, the following information:

- The data collected from in-stack monitoring instruments
- The records on daily feed rates and clinker production rate
- The amount and type of fuel burned
- ~~Total quantity (by weight) of tires used as supplemental fuel~~
- ~~The firing rate of whole tires shall be quantified (weighed) continuously and recorded~~
- Calibration logs for all instruments
- Maintenance/repair logs for any work performed on equipment or instrument which is subject to this permit;
- Total coal, petroleum coke, natural gas, solid waste material, and oil usage.

All measurements, records, and any other data required to be maintained by CSR Rinker shall be retained for at least five (5) years following the date on which such measurements, records, or data are recorded. These data shall be made available to the FDEP and to DERM upon request. DERM shall be notified in writing at least 15 days prior to the testing (auditing) of any instrument required to be operated by these specific conditions in order to allow witnessing by authorized personnel. [Rule 62-4.070(3), F.A.C.]

~~B.27 The Permittee shall comply with Rules 62-701 and 62-711, F.A.C. All original submittals in response to this Specific Condition shall be submitted to:~~

~~Waste Tire Financial Coordinator
Solid Waste Management Section
Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, Florida 32399-2400~~

~~Solid Waste Section
Department of Environmental Protection
Southeast District Office
P.O. Box 15425
West Palm Beach, Florida 33416~~

~~B.28 The maximum allowable number of waste tires stored on site at any time is 28,000. Only whole waste tires shall be stored on site.~~

~~B.29 No processed waste tires shall be stored or burned at this site at any time unless the permittee obtains a permit modification from the Department. Waste tires shall only be received in enclosed trailers from registered waste tire collectors who possess valid registrations pursuant to Rule 62-711, F.A.C.~~

~~B.30 The Permittee shall not place waste tires on the ground. Waste tires shall be received in closed vans and unloaded directly into the tire feeding hopper. Also, in order to control mosquitoes at the site, waste tires shall be sprayed with an insecticide prior to receipt at the facility.~~

~~B.31 The Permittee shall document the number of tires burned during a week and then establish storage and inventory based on a typical weekly requirement. The Permittee shall keep all documentation concerning tire inventory at the site and make the information available for Department review during inspections.~~

A copy of this letter shall be filed with the referenced permit and shall become part of the permit. The Miami-Dade County Department of Environmental Resources Management will revise the present Title V Operation Permit as advised in the Notice of Final (Title V) Permit dated October 30, 2000.

Any party to this permitting decision (order) has the right to seek judicial review of it under section 120.68 of the Florida Statutes, by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel, Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000, 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 must be filed within thirty days after this order is filed with the clerk of the Department.

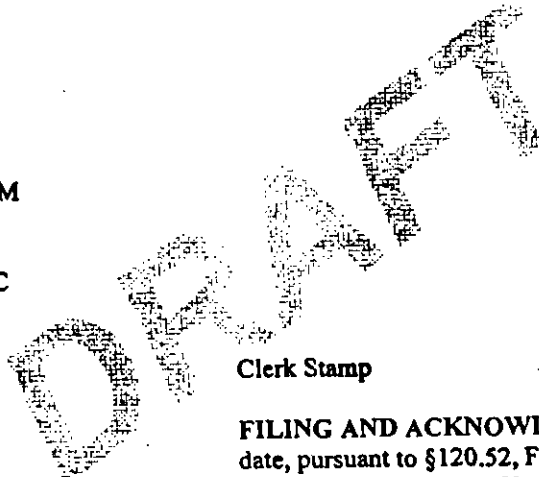
Executed in Tallahassee, Florida.

Howard L. Rhodes, Director
Division of Air Resources
Management

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Permit Amendment was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on _____ to the person(s) listed:

Sharon DeHays, VP, Rinker*
Mike Vardeman, Rinker
Gregg Worley, EPA
John Bunyak, NPS
Isidore Goldman, DEP SED
H. Patrick Wong, Miami-Dade DERM
John Koogler, PhD., P.E., K&A
Martha Nebelsiek, Esq., DEP OGC
Segundo J. Fernandez, Esq., OHF&C



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.

(Clerk)

(Date)

Revised Table 1-2. Air Pollutant Standards and Terms.

FACILITY ID NUMBER: 0250014

**Permittee:
Rinker Materials Corporation**

**Original DEP File No. 0250014-002-AC
Permit Modification No. 0250014-007-AC
Portland Cement Plant and Associated Equipment
Dry Process Technology**

**Emission Unit - Kiln System
Cement Plant Modernization**

| E.U. ID# | Description | Pollutant ID | Fuel(s) [2] | Allowable Emissions [3] | | Equivalent Emissions [4] | | Basis |
|----------|----------------------|-------------------------------------|-------------------|--|----------|--------------------------|--|------------|
| | | | | Permit limits | lb/hr | TPY | | |
| ARMS # | Kiln/Cooler/Raw Mill | PM | coal/gas/WTDF/oil | 0.20 lb/ton kiln _{ph} feed * | 44 | 193 | | RMC - Data |
| ARMS # | Kiln/Cooler/Raw Mill | PM ₁₀ | coal/gas/WTDF/oil | 0.17 lb/ton kiln feed * | 37.40 | 164 | | RMC - Data |
| ARMS # | Kiln/Cooler/Raw Mill | SO ₂ | coal/gas/WTDF/oil | 0.7 lb/MMBTU 2.23 lb/ton of clinker | 306 | 1340 | | RMC - Data |
| ARMS # | Kiln/Cooler/Raw Mill | NO _x | coal/gas/WTDF/oil | 1.53 lb/MMBTU 4.9 lb/ton of clinker | 671 | 2940 | | RMC - Data |
| ARMS # | Kiln/Cooler/Raw Mill | CO | coal/gas/WTDF/oil | 3.01 lb/ton clinker | 412 | 1807 | | RMC - Data |
| ARMS # | Kiln/Cooler/Raw Mill | VOC | coal/gas/WTDF/oil | 0.1 lb/ton clinker | 13.7 | 60 | | RMC - Data |
| ARMS # | Kiln/Cooler/Raw Mill | H ₂ SO ₄ mist | coal/gas/WTDF/oil | 0.014 lb/ton clinker | 1.92 | 8.4 | | AP - 42 |
| ARMS # | Kiln/Cooler/Raw Mill | Beryllium | coal/gas/WTDF/oil | 6.6x10 ⁻⁷ lb/ton clinker | 9.04E-05 | 0.000386 | | AP - 42 |
| ARMS # | Kiln/Cooler/Raw Mill | Mercury | coal/gas/WTDF/oil | 2.4x10 ⁻⁶ lb/ton clinker | 3.30E-03 | 0.014 | | AP - 42 |
| ARMS # | Kiln/Cooler/Raw Mill | Lead | coal/gas/WTDF/oil | 7.5x10 ⁻⁶ lb/ton clinker | 0.01 | 0.045 | | AP - 42 |
| ARMS # | Kiln/Cooler/Raw Mill | VE | coal/gas/WTDF/oil | 10% opacity | | | | NSPS |

ALLOWABLE OPERATING RATES

| Kiln/Cooler/Raw Mill | | |
|--|----------|------|
| Hours of operation per year | Hours | 8760 |
| Kiln preheater feed rate (kiln _{ph}) * | TPH | 220 |
| Kiln Heat Input | MMBtu/hr | 437 |
| Clinker Production (1) | TPH | 137 |
| Cooler throughput rate | TPH | 137 |

NOTES

- (1) At a maximum design clinker production rate of 137 TPH and preheater feed rate of 220 TPH, utilizing a conversion factor of 0.60: (220 x 0.60 = 137).
 (2) Fuel combustion as specified in Specific Condition No. B.5, and the protocols established by DERM. See also Specific Condition B.13.
 (3) Compliance Units. This facility shall demonstrate compliance based on these standards.
 (4) "Equivalent Emissions" are based on annual emissions at 8760 hrs/yr. The "Equivalent Emissions" are also listed for informational purpose and for PSD and recordkeeping tracking purposes.

Revised Table 2-1. Compliance Requirements.

FACILITY ID NUMBER: 0250014

**Original DEP File No. 0250014-002-AC
Permit Modification No. 0250014-007-AC**

**Permittee:
Rinker Materials Corporation
Portland Cement Plant No. 2 and Associated Equipment**

| E.U. ID# | Description | Pollutant Name or parameter | Fuel(s) [1] | EPA/Reference Method/CMS * | Testing Time Frequency | Min. Compliance Test Duration | CMS * Compliance |
|----------|----------------------|-------------------------------------|---------------------|----------------------------|------------------------|-------------------------------|------------------|
| ARMS # | Kiln/Cooler/Raw Mill | PM/PM ₁₀ | Oil/Coal/Gas/AWTFDF | 5 or 201/201A | initial/annual [8] | 3 one-hr run | |
| ARMS # | Kiln/Cooler/Raw Mill | VE | Oil/Coal/Gas/AWTFDF | 9/COMS | initial/annual/COMS | 3 one-hr run | No [4] |
| ARMS # | Kiln/Cooler/Raw Mill | SO ₂ | Oil/Coal/Gas/AWTFDF | CEMS | daily average | continuous | Yes [6] |
| ARMS # | Kiln/Cooler/Raw Mill | NO _x | Oil/Coal/Gas/AWTFDF | CEMS | daily average | continuous | Yes [3] |
| ARMS # | Kiln/Cooler/Raw Mill | CO | Oil/Coal/Gas/AWTFDF | 10 [5] | initial/annual | 3 one-hr run | |
| ARMS # | Kiln/Cooler/Raw Mill | VOC | Oil/Coal/Gas/AWTFDF | 25 or 25A [2] | initial | 3 one-hr run | Yes[2] |
| ARMS # | Kiln/Cooler/Raw Mill | H ₂ SO ₄ mist | Oil/Coal/Gas/AWTFDF | 8 | initial | 3 one-hr run | |
| ARMS # | Kiln/Cooler/Raw Mill | Hg, Pb, Be | Oil/Coal/Gas/AWTFDF | 29 | initial | 3 one-hr run | |
| ARMS # | Fugitive sources | VE | | 9 | Protocol [7] | | |
| ARMS # | Minor Sources | VE | | | initial/annual | 3 one-hr run | |

Notes:

- [1] Initial compliance testing shall be conducted under all the scenarios this facility is planning to operate under. Specific condition B.13. Annual testing of emissions shall be conducted during the worst case scenario that this facility would normally operate under. Frequency of testing after initial compliance shall be determined by DERM. Fuels to be burned are specified in Specific Condition B.5.
 - [2] VOC emission shall be tested initially and annually to comply with the condition of this permit. ~~Thereafter, compliance will be assumed provided the CO allowable emission rate is reached.~~ Annual RATA test results for the VOC CEMS may be used to demonstrate compliance in lieu of a separate annual source test.
 - [3] NO_x - The continuous emission monitoring system (CEMS) data shall be used for the Kiln for compliance requirement. The CEMS calibration and maintenance shall meet the applicable requirements of 40 CFR 60, Appendix B and Appendix F.
 - [4] Pursuant to 40 CFR 60, Subpart F, the kiln/cooler exhaust system shall be equipped with continuous opacity monitoring system (COMS) to record the opacity at the stack to indicate proper maintenance and operation. Monitoring of the opacity of emissions shall be demonstrated by COMS pursuant to 40 CFR 60.63. Notification and recordkeeping shall be in accordance with 40 CFR 60.7 and 40 CFR 60.65.
 - [5] Continuous process monitors for CO and/or O₂ to optimize combustion conditions for pollution control shall be part of the process.
 - [6] SO₂ - The continuous emission monitoring (CEMS) data shall be used for the Kiln compliance requirement. The CEMS calibration and maintenance shall meet the applicable requirements of 40 CFR 60, Appendix B and Appendix F.
 - [7] Protocol as approved by the Permitting Authority (DERM).
 - [8] Rinker has the option of using Method 5 if they stipulate that all of the PM is PM₁₀.
- * CMS [=] compliance demonstrated by a continuous monitoring system: CEMS or COMS.

TECHNICAL EVALUATION
AND
PRELIMINARY DETERMINATION

CSR RINKER MATERIALS CORPORATION
MIAMI, DADE COUNTY, FLORIDA

Portland Cement Manufacturing Facility
Modernization and Expansion Project
Finalization of Fuel, Emissions and Monitoring Conditions

Permit No. 0250014-007-AC

Department of Environmental Protection
Division of Air Resources Management
Bureau of Air Regulation

September 28, 2001

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

I. APPLICANT NAME AND ADDRESS

CSR Rinker Materials Corporation
1200 NW 137th Avenue
Miami, Florida 33182

II. FACILITY INFORMATION

A. FACILITY LOCATION

CSR Rinker Materials Corporation (Rinker) recently modernized the existing Miami Cement plant by replacing the wet-process cement plant with a 1.2 million TPY clinker dry-process cement production line [137 ton of clinker per hour (TPH)] at its existing Miami cement facility.

This site is approximately 8.2 kilometers to the Everglades National Park, a Class I PSD Area, and in an ozone (O₃) maintenance area in Dade County.

B. FACILITY CLASSIFICATION CODE (SIC)

Major Group No. 32, Clay, Glass, and Concrete Products
Industry Group No. 324 Cement, Hydraulic
Industry No. 3241 Cement, Hydraulic

C. FACILITY CATEGORY

The Rinker Materials Corporation (Rinker) Miami Cement Plant directly emits more than 100 tons per year (TPY) of several regulated air pollutants and emits over 10 TPY of at least one hazardous air pollutant (HAP). Therefore it is classified as a "Major Source of Air Pollution or Title V Source," per the definitions in Rule 62-212.200, F.A.C.

This industry is listed in Table 212.400-1, "Major Facilities Categories", Section 62-212.400, F.A.C. Therefore, stack and fugitive emissions of over 100 TPY of carbon monoxide (CO), volatile organic compounds (VOC), sulfur dioxide (SO₂), nitrogen oxides (NO_x), or particulate matter (PM/PM₁₀) characterize the existing installation as a Major Facility per the definitions in Rule 62-210.200, F.A.C. and subject to applicability review for the requirements of Rule 62-212.400, F.A.C., Prevention of Significant Deterioration (PSD).

Per Table 212.400-2, "Regulated Air Pollutants - Significant Emission Rates", modifications at the facility resulting in emissions increases greater than 40 TPY of NO_x or SO₂, 7 TPY of SAM, 25/15 TPY of PM/PM₁₀, 3 TPY of fluorides, 1200 pounds per year (lb/yr) of lead or 200 lb/yr of mercury require review per the PSD rules and a determination for Best Available Control Technology (BACT) per Rule 62-212.400, F.A.C.

The approved Rinker modernization project was not subject to New Source Review including provisions for the Prevention of Significant Deterioration of air quality (PSD) because the modernized plant was expected to result in less overall air pollution than the existing plant. This is primarily due to the lower fuel requirements per unit of product characteristic of the dry processes.

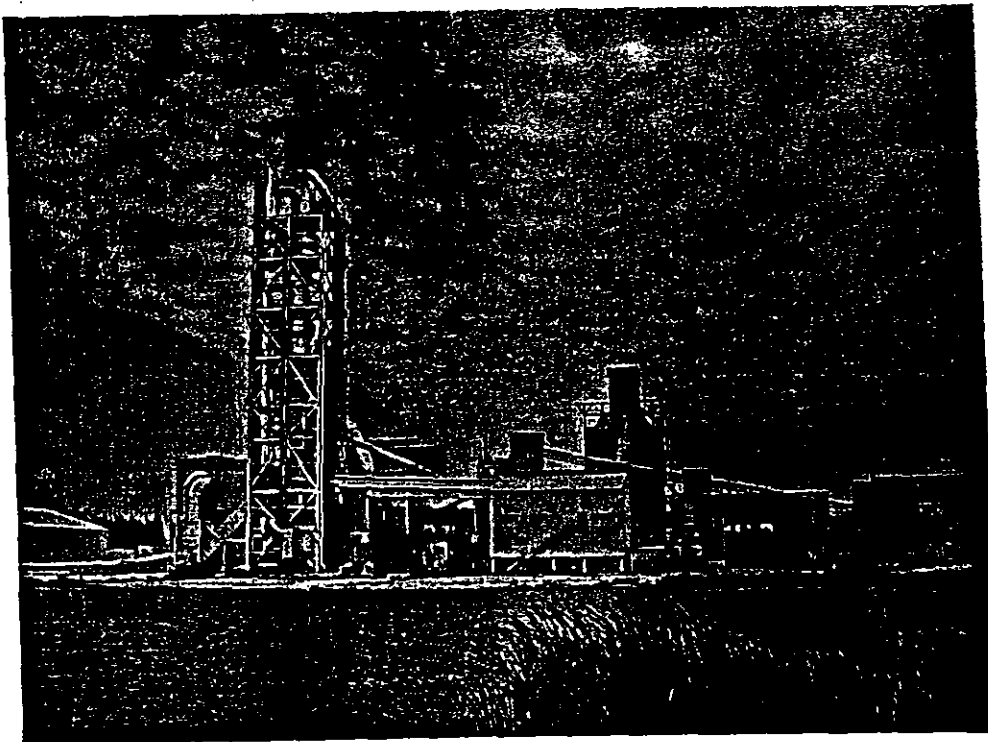
TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

III. MODERNIZATION PROJECT

The Department issued a permit to Rinker on September 11, 1997 to modify the existing wet process plant by incorporating the modern dry process technology including a preheater and precalciner along with indirect firing. The dry process preheater/precalciner (PH/PC) kiln is the most fuel-efficient cement pyroprocessing technology currently available. Thermal efficiencies will be improved with the PH/PC kiln and the amount of fuel combusted per ton of clinker produced is expected to be reduced

The modernized cement plant will produce up to 137 TPH of clinker (highest maintained rate over a day). The annual potential production rate will not exceed 1.2 million TPY of clinker. The major equipment will include a PH/PC kiln, a clinker cooler, raw mill, finish mill, silos, conveyers, and particulate control/dust collection and recycling equipment. The cement product will be stored in silos and shipped in bags or in bulk by rail or truck.

A more complete project and process description was provided in the Technical Evaluation and Preliminary Determination issued for the modernization project on June 23, 1997. Rinker completed basic construction of the dry process kiln line in Spring of 2000. Compliance tests were conducted during the second half of the year. Following is a photograph of the constructed dry process plant taken in late June 2001.



CSR Rinker Modernized Dry Process Cement Plant in Miami, Florida

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

IV. PERMIT EXTENSION REQUEST

The original construction permit provided for an expiration date of May 30, 1999. The permit was revised in 1999 to show an expiration date of September 30, 2000. The Department received a request to further extend the permit (until March 31, 2002) on September 8, 2000. The stated purpose of the extension was for consistency with a Proposed Title V Operation Permit and to conduct additional work to:

- Try out various raw materials to resolve production-limiting issues.
- Design and possibly install a chloride reduction system.
- Design and construct a tire/waste handling system.

The Department did not issue the extension at an early date because the Department lacked reasonable assurance that the facility would meet the volatile organic compound emissions limit of 0.1 pounds per ton of clinker and additional testing had not yet been conducted for certain other pollutants. By that time, the plant was producing cement, but there were a number of delays by Rinker in testing of volatile organic compounds (VOC) emissions that was originally scheduled for September 2000.

Compliance tests conducted for beryllium in December 2000 (received in May 2001) indicate emissions about 50 percent greater than permitted in terms of lb/ton of clinker. On February 28, 2001 the Department received the results of the VOC emission tests. These results indicate very marginal non-compliance based on the factor given in the permit for calculation of clinker production based on raw material input. Rinker subsequently provided information based on their calculations of the conversion factor of raw materials to clinker and reported the VOC emissions tests as marginally in compliance based on lb/ton of clinker.

At the request of Rinker, the Department did not act on the permit extension. Such requests were sent on Rinker's behalf on November 30, 2000, January 12, February 28, March 26, April 30, and May 24, 2001. Over the same period Rinker asked for some additional permit modifications and consolidated them in a single letter plus attachments dated June 14, 2001. On June 28, Rinker requested "the Department enter a further extension of time for taking action on the permit amendments until September 30, 2001.

The additional requests are to:

- Remove the beryllium limit.
- Adopt emission limit units and reporting requirements for sulfur dioxide and nitrogen oxides that are more consistent with the units for other pollutants from the same plant and the practice at other cement plants throughout the state.
- Propose an alternative to a Department initiative to include compliance assurance requirements for VOC.
- Concur with a Department initiative to require empirical raw materials to clinker conversion factors prior to conducting future tests.

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

V. PRESENT SITUATION

As of this time, all physical construction required to make cement at or near the permitted production limit is complete. No facilities have been installed to burn permitted supplementary fuels such as tires, sewage sludge, and non-hazardous solid wastes. A Title V Operation Permit with a Compliance Plan was issued in October 2000. Compliance testing has been conducted. Following are the results of tests for certain pollutants of interest to the Department.

| Pollutant | Permit Limit | Result |
|-----------------|--|--|
| SO ₂ | 0.70 lb/mmBtu | 0.01 lb/mmBtu (~0.03 lb/ton) |
| NO _x | 1.53 lb/mmBtu | 1.0 lb/mmBtu (~3 lb/ton clinker) |
| Beryllium | 0.66 x 10 ⁻⁶ lb/ton clinker | 1.16 x 10 ⁻⁶ lb/ton clinker |
| VOC | 0.1 lb/ton clinker | ~ 0.1 lb/ton clinker |

VI. EVALUATION

The Department adopted emission limits in terms of lb/mmBtu for SO₂ and NO_x because the applicable requirements were given in these terms. These include the limits in Chapter 24 of the Miami-Dade County Code of 1.1 and 1.2 lb SO₂/mmBtu for liquid and solid fuels respectively. The permit limit was set at 0.70 lb SO₂/mmBtu to avoid PSD applicability as part of a netting calculation.

The SO₂ emissions are significantly lower than permitted. The reason is that the dry preheater/calcliner process provides an opportunity for self-scrubbing of the exhaust gases by finely-divided lime. Therefore virtually all fuel sulfur is removed in this manner. The raw materials fed into the preheater apparently contain minimal sulfur (such as pyrites). Therefore SO₂ emissions from "roasting" in the upper stages of the preheater are minimal.

The Department has reasonable assurance that the project easily complies with the Miami-Dade ordinance and proposes to reset the permit limit to the "lb/ton of clinker" equivalent of 0.70 lb SO₂/mmBtu. The equivalent value is 2.23 lb SO₂/ton of clinker based on the emission limit of 306 lb/hour divided by the permitted clinker production limit of 137 tons per hour.

The NO_x emissions are roughly 60 percent of the permitted value and are roughly equal to levels expected by the Department for the type of kiln installed by Rinker (preheater/precalcliner without staged combustion). The actual emissions are about half of the emission limit per the Department's Reasonable Available Control Technology (RACT) rule applicable to the cement industry of 2.0 lb NO_x/mmBtu. The previous wet process kilns were out of compliance with the mentioned RACT rule.

The permit limit is 1.53 lb NO_x/mmBtu. This was the limit needed to "net out" of PSD during the permitting of the modernization project and meet the RACT rule. The equivalent value is 4.9 lb NO_x/ton of clinker based on the emission limit of 671 lb/hour divided by the permitted clinker production limit of 137 tons per hour.

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

The Department concludes that that the kiln will comply with the applicable NO_x emission limits by complying with a limitation of 4.9 lb NO_x/ton of clinker. Furthermore on the basis of tests conducted, the Department has reasonable assurance that the unit complies with the NO_x emissions limits.

The beryllium emissions are greater than permitted by about 50 percent. The Department believes that for this type of kiln, raw materials and fuels, baghouses represent the proper technology to control beryllium emissions. The company installed a baghouse but accepted a low value to avoid PSD.

The Department recognizes that the EPA and the Department no longer regulate beryllium as a "PSD pollutant". The pollutant is now regulated under industry-specific rules pursuant to Title III of the Clean Air Act. The Maximum Achievable Control Technology rules applicable to cement kilns regulate beryllium at kilns that (unlike Rinker) burn hazardous waste.

For reference, an EPA study found that emissions of beryllium from 21 kilns that burn hazardous waste range from 0.05 to 2.2 ug/m³ at 7 percent oxygen. The average is 0.59 ug/m³. Emissions from three kilns that do not burn hazardous waste ranged from 0.2 to 0.31 ug/m³ with an average of 0.27 ug/m³.

Rinker reported that its emissions of beryllium were 0.37 ug/m³ at 7% O₂. This level is close to the range of the three kilns that do not burn hazardous wastes. The Department will modify the permit accordingly.

Rinker conducted VOC tests several months after they planned to conduct them. The results are marginally out of compliance based on the raw materials to clinker conversion factor given in the permit. Without additional permit conditions, the Department does not have reasonable assurance that the kiln will operate in compliance with the limit or emit less VOC than required to "net out" of PSD.

Other tests indicated that the kiln is in compliance with the CO limitations. Because the VOC tests did not clearly show compliance, it can not be assumed that future compliance with the VOC limit can be demonstrated by reliance on the CO tests as surrogates.

Apparently VOC emissions have much to do with raw materials and not just incomplete fuel combustion. Raw materials use is much greater for the new kiln than the old ones based on clinker manufacturing capacity. Therefore it is not surprising that such an increase occurred.

Additionally, Rinker plans to install a kiln bypass that will necessitate additional fuel use. It is not known how this will affect the lb VOC/hr or lb VOC/ton of clinker emitted.

In June, Rinker submitted to Miami-Dade DERM an updated version of the feed materials hydrocarbon monitoring plan previously submitted to the Department on April 6. DERM advised Rinker by letter dated July 25 that "quarterly testing, in conjunction with or separate from the raw material sampling and analysis, is also not sufficient to provide reasonable assurance of compliance with the VOC permit limits."

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

The Department agrees with DERM and notes that DERM is the compliance authority and the Title V permitting authority. Therefore the Department proposes installation of a continuous emission monitoring system (CEMS) for VOC. Such equipment was required by the Department following non-compliance by Florida Rock Industries (Alachua County) with a *more stringent* VOC limitation of 0.12 lb/ton of clinker. Additionally a VOC CEMS monitor is required for the Tarmac (Miami) modernization project to insure that PSD is not triggered. A VOC CEMS with real-time reporting to the Department and the Public is required at the Suwannee-American Cement project. A VOC CEMS will also be required at planned but unbuilt projects in Brooksville.

VII. SOLID WASTE FUELS

The original permit provided for burning of sewage sludge, tires, and certain non-hazardous solid wastes. Although the kiln started up in Spring of 2000, none of these wastes have been used as of September 2001.

At this time, Rinker is embarking on a project to construct the bypass to solve a problem caused by the buildup of certain chemical species in recirculating streams within the pyroprocessing system. These constituents tend to deposit on certain surfaces in the pyroprocessing equipment causing lower production and periodic shutdowns. Therefore Rinker is still engaged in solving technical production problems and not ready to construct the equipment to burn the additional solid waste fuels.

The approval to burn certain solid wastes was given based on the opinions of Rinker that it could do so in the new plant. This was probably based on experience burning tires at mid-kiln in the retired wet process kilns. The new dry process preheater calciner kiln cannot burn the quantity of tires originally envisioned by Rinker (40 percent by heat input) without substantial modifications.

For example, Florida Rock Industries is installing a multi-stage combustion calciner that will use tires as a reburn fuel for NO_x control. The company expects to be able to burn up to 15 percent tires under this configuration. Both Florida Rock and Suwannee-American believe they can only combust 40 percent tires by installing a tire gasification system.

As of this time, neither the Department nor DERM has received details regarding the tire handling and burning equipment. With the bypass project taking precedence, it is reasonable to conclude that tires cannot be burned at the facility for some time in the future.

Similarly there is no equipment to inject sewage sludge. Rinker advised that it does not actually wish to burn this material. Finally, there is no equipment to introduce diaper derived fuel or any other solid waste into the kiln. The Department will modify the permit to reflect the capability of the kiln as constructed. The permitted fuels will be the various allowed used fuel oils, coal, and petroleum coke.

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

The Department believes it is possible to burn some of the solid wastes following modification of the kiln. The removal of these waste fuels from the permit is without prejudice to Rinker and does not prohibit or discourage Rinker from applying for a permit to construct and install equipment to burn certain solid fuels. Any future requests should be directed to the Miami-Dade County Department of Environmental Resources Protection. It is noted that the County's Environmental Quality Control Board already approved a waiver request (to their Wellfield Rules) to allow these wastes at the facility.

VIII. PERMIT MODIFICATION

The Department intends to modify the permit as shown in the enclosed draft letter. The permit will be extended to March 31, 2002 for the purpose of installing the bypass and the VOC CEMS. Miami-Dade DERM will revise the Title V permit to comport with the revised construction permit as advised in the Notice of Final (title V) Permit dated October 31, 2000.

Miami-Dade DERM will process further non-PSD permits.