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ENVIRONMENTAL RESOURCES MANAGEMENT
AIR QUALITY MANAGEMENT DIVISION

SUITE 900

33 S.W. 2nd AVENUE

MIAMI, FLORIDA 33130-1540

(305) 372-6925

APR 13 1998

BUREAU OF
AIR REGULATION

April 6, 1998

CERTIFIED MAIL -P 343 639 692
RETURN RECEIPT REQUESTED

Mr. James S. Jenkins, III
Vice President of Cement Operations
Rinker Materials Corporation
1501 Belvedere Road
West Palm Beach, Florida 33406

File No.: 0250014-003-AV
County: Miami-Dade
Project: Rinker Materials Corporation
Portland Cement Plant

Re: Second Request for Additional Information Regarding Initial Title V Permit Application
Rinker Materials Corporation - Portland Cement Plant

Dear Mr. Jenkins:

Your additional information was received on March 11, 1998. However, in order to continue processing your application, the Department will need the below additional information pursuant to Rule 62-213.420(1)(b)3., F.A.C., and Rule 62-4.070(1), F.A.C.

Should your response to any of the below items require new calculations, please submit the new calculations, assumptions, reference material and appropriate revised pages of the application form.

EMISSION UNIT DETAIL INFORMATION -Emission Unit No. 001, 002 and 003

FINISH MILLS No. 1, 2 and 3 - Emission Unit No. 001, 002 and 003 respectively

Clarify the following information for finish mills No. 1, 2 and 3:

- It appears that this application will require a PSD review due to the fact that the increase of 27 TPH proposed for each of the finish mills, No. 1, 2 and 3, will increase emissions. Is this increase considered in the application for the new facility. Furthermore, the establishment of an increase of production cannot be completed through the Title V permitting process. This must be done in a construction permit in accordance with the applicable provisions of 62-210, 62-212, and 62-4 FAC. Should a PSD permit application be necessary, it should be sent along with the correct processing fee to the attention of Clair Fancy, P.E., Bureau Chief, at the Tallahassee Office. For issues concerning PSD applicability determinations and the required information for the application submittal, please contact John Reynolds at (904) 488-1344.

EMISSION UNIT DETAIL INFORMATION – Emission Unit No. 012 and 013

FINISH MILLS No. 4 and 5 – Emission Unit No. 012, and 013 respectively

Please revise information submitted for finish mill # 4 and 5, there is an existing permit AC 13-098946 and AC 13-117141 (copy of specific conditions for each of the finish mill no. 4 and 5 attached).

EMISSION UNIT DETAIL INFORMATION – Emission Unit No. 014

STONE DRYER-Emission Unit No. 014

Review of the file shows the stone dryer has been permitted to use on-specification waste as a fuel in the afterburner, update the application with this change.

FACILITY WIDE FUGITIVE – Emission Unit 019

GENERAL EMISSIONS UNIT INFORMATION

- Emissions Unit 019 is described as representing the fugitive emissions from several “unregulated emissions units” located throughout the facility.
 - a. For the listed fuel storage tanks, please describe the type of fuel stored, the storage capacity, and the date of installation so that NSPS applicability can be properly determined.
 - b. One of the Maintenance Activities is listed as Parts Cleaning. Would this be classified as a degreasing operation? Please provide the name(s) of the solvents used and their quantities. Are the vapors heavier than air?
 - c. Please provide the total fuel consumption by all emergency generators within the facility. Please also provide the type of fuels used. Are any of these emergency generators subject to the Federal Acid Rain Program?
 - d. Please provide the total diesel fuel consumption of all of the diesel engines located within the facility. Are any of these engines subject to the Federal Acid Rain Program?
 - e. It is stated that this emissions unit included the fugitive emissions from other emissions units. Does this mean the fugitive emissions from Emissions Units 001 through 018? Or other emissions units located within the facility, not mentioned explicitly in the application. If it is the latter, please provide a description of these emissions units.
 - f. It is stated that this emissions unit includes fugitive emissions from sand and media blasting, and hand sanding operations within the facility. Please describe the location of where these operations take place. Please provide information concerning the reasonable precautions that are performed in order to reduce unconfined particulate matter emissions.

EMISSIONS UNIT INFORMATION - F. SEGMENT (PROCESS/FUEL) INFORMATION:

- It appears that the SCC code used in the segment information for Emissions Unit 019 is not appropriate for the types of unregulated emissions units described. Please provide a separate set of segment information for each type of activity mentioned. In addition, if these activities operated with different methods of operation, a separate set of information must also be provided.

Professional Engineer (P.E.) Certification Statement:

Rule 62-4.050(3), F.A.C. requires that all applications for a Department permit must be certified by a professional engineer registered in the State of Florida. This requirement also applies to responses to Department requests for additional information of an engineering nature. As a result, your response should be certified by a professional engineer registered in the State of Florida. Please complete and submit a new P.E. certification statement page from the new long application form, DEP Form No. 62-210.900, effective March 21, 1996 (enclosed).

The Department must receive a response from you within 90 (ninety) days of receipt of this letter, unless you (the applicant) requests additional time under Rule 62-213.420(1)(b)6., F.A.C.

If you should have any questions, please call Eva Kunath at (305) 372-6926.

Sincerely,



M. Eva Kunath
Air Permitting Engineer
Air Facilities Section

Enclosures

copy to:
C. H. Fancy, P.E. Chief, Bureau of Air Regulation
A.A. Linero, P.E., Administrator, New Resource Review Section
Steve Cullen, P.E., Koogler & Associates



KOOGLER & ASSOCIATES
ENVIRONMENTAL SERVICES
4014 NW THIRTEENTH STREET
GAINESVILLE, FLORIDA 32609
352/377-5822 ■ FAX/377-7158

RECEIVED

April 10, 1998

APR 13 1998

Mr. A.A. Linero, P.E.
Administrator, New Source Review Section
Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

**BUREAU OF
AIR REGULATION**

SUBJECT: Written Comments Concerning the Department's Proposed Action
CSR Rinker Materials Corporation
Draft Air Construction Permit Modification No. 0250014-006-AC

Dear Mr. Linero:

As you are aware, I have been working closely with the Department on CSR Rinker's cement plant modernization project for nearly two years. I have been quite pleased with the technical competence and professionalism exhibited by you and your staff.

However, I am perplexed and distressed by the position you took during our telephone conversations of April 7, 1998. The position you stated was essentially "take it or leave it" for the Draft Permit Modification. This position disregards entirely Dr. Koogler's March 3, 1998 letter to the Department.

During the referenced telephone conversations, I identified 3 issues:

1. Your insistence on requiring a public notice for this permit modification, regardless of the provisions of Chapter 62-103.150(2)(a)5., F.A.C.
2. Your insistence on retaining the Department-initiated rewording of Specific Condition B.5(1)d., which would unduly restrict the use of the described supplemental fuel materials from a permitted level of 30% of total heat input to less than 3% of total heat input.
3. Your reversal on the deletion of the kiln exit temperature requirement, which was deemed acceptable in your Technical Evaluation and Preliminary Determination.

As a result, the Permit Modification No. 0250014-006-AC is more restrictive than existing air construction permit no. 02540014-002-AC, and offers little net benefit.

By this letter, CSR Rinker Materials Corporation is requesting the Department to:

- Delete NSPS Subpart Eb from the list of applicable requirements on Page 5 of 17 of Permit No. 0250014-002-AC
- Delete Specific Condition B.5.(1)d. of Permit No. 0250014-006-AC

- Revise the third paragraph of Specific Condition B.11. of Permit No. 0250014-006-AC
- Delete Specific Condition B.20.B.(1) & (2) of Permit No. 0250014-006-AC
- Add Specific Condition B.23(1) & (2) to Permit No. 0250014-006-AC
- Renumber Specific Condition B.35 of Permit No. 0250014-006-AC as Specific Condition B.36
- Provide an Intent to Issue for Permit No. 0250014-006-AC, as specified here, without requiring a public notice

A complete discussion of all changes from existing air construction permit no. 0250014-002-AC is attached to this letter, as Attachment 1. A brief discussion of the points mentioned above follow in this letter.

Delete NSPS Subpart Eb from the list of applicable requirements on Page 5 of 17 of Permit No. 0250014-002-AC

The referenced subpart is and has been inapplicable to the cement plant modernization project. In May 1997, information was provided in response to the Department's request, which demonstrated that the plant was not defined as a municipal waste combustor.

The definition of municipal waste found at 42 USC 7429, Section 129(g)(5) is directly applicable and reads in pertinent part:

"...unit shall not be considered to be combusting municipal waste for purposes of section 111 [NSPS]...if it combusts a fuel feed stream, 30 percent or less of the weight of which is comprised, in aggregate, of municipal waste."

The Department considered this information, and certain solid wastes were limited to 30% of total heat input by Specific Condition B.5(1)d. of Permit No. 0250014-002-AC. The 10 megagrams per day exemption was inapplicable in May 1997, as the proposed plant did not even fit the definition of a "municipal waste combustor".

Subsequently, NSPS Subpart Eb was modified on August 25, 1997 (effective October 24, 1997). 40 CFR 60.50b(p), was added and states unequivocally:

Cement kilns firing municipal solid waste are not subject to this subpart.

Delete Specific Condition B.5.(1)d. of Permit No. 0250014-006-AC

The referenced Specific Condition would unduly restrict the use of the described supplemental fuel materials from a permitted level of 30% of total heat input to less than 3% of total heat input.

The Department's stated basis is NSPS Subpart Eb, which is clearly inapplicable as stated above.

Revise the third paragraph of Specific Condition B.11. of Permit No. 0250014-006-AC

The requirements in the third paragraph of Specific Condition B.11 are inconsistent with Department rules. This condition is in conflict with Department rule 62-210.700, F.A.C. that is included as Common Specific Condition (CSC) 3.4 of Permit No. 0250014-002-AC. The Department rule and CSC 3.4 authorize excess emissions during start-up, shutdown or malfunction provided, among other conditions, that best operating practices are adhered to.

Delete Specific Condition B.20.B.(1) & (2) of Permit No. 0250014-006-AC

Add Specific Condition B.23(1) & (2) to Permit No. 0250014-006-AC

The Department has significantly reworded Specific Condition B.20 of Permit No. 0250014-002-AC by adding a Section B that specifies the reporting and recordkeeping requirements related to solid wastes as supplemental fuel. This change is of concern for the following reasons:

- No changes were requested for this condition
- The changes reference an inapplicable rule – 40 CFR 60, Subpart Eb

However, CSR Rinker is not opposed to recordkeeping and reporting requirements related to solid wastes as supplemental fuel. Due to a scrivener's error, there is not a Specific Condition 23 of Permit No. 0250014-002-AC. It is suggested that this Specific Condition be written as follows:

B.23 In order to document compliance with Specific Conditions B.5(1)c. and B.5(1)d. **Solid Wastes**, the following requirements shall be adhered to as a minimum:

- (1) Recordkeeping when burning the solid waste specified in Specific Condition B.5(1)c. shall be in compliance with Specific Condition B.5(1)e. Records of the amount of solid waste fired shall be kept on a daily basis.
- (2) Recordkeeping when burning non-hazardous municipal solid waste specified in Specific Condition B.5(1)d. shall be in compliance with Specific Condition B.5(1)d. and Specific Condition B.5(1)e. Records of the amount of municipal solid waste fired shall be kept on a daily basis.

Please be aware that CSR Rinker considers the inclusion of this Specific Condition as a Good Faith effort to be responsive to the Department's concerns, as this specific condition increases the required recordkeeping burden on CSR Rinker over that imposed by Permit No. 0250014-002-AC.

**Renumber Specific Condition B.35 of Permit No. 0250014-006-AC
as Specific Condition B.36**

The Specific Condition related to the management of used oil and used oil filters is Specific Condition B.36 in Permit No. 0250014-002-AC. The appropriate changes have been made in Permit Modification No. 0250014-006-AC, but the reference is to Specific Condition No. B.35.

Provide an Intent to Issue for Permit No. 0250014-006-AC, as specified here, without requiring a public notice

Permit No. 0250014-002-AC was publicly noticed in accordance with the provisions of Chapter 62-103.150(2)(a)1., F.A.C.

Chapter 62-103.150(2)(a)5., F.A.C. specifically addresses the requirement for an additional notice, as follows:

*After publication of a Notice of Intent to Issue or Intent to Deny a permit application, the applicant shall publish an additional notice if the subject activity or project is substantially modified by the applicant and the Department proposes to issue the permit with the modification. The additional notice shall not be required for applications for which a Notice of Administrative Proceeding on Permit Application has been published pursuant to paragraph (2)(e) below. **For the purposes of this subparagraph, the term "substantially modified" means a major relocation or modification of the activity or project that is reasonably expected to cause new or greater adverse environmental impacts upon the substantial interests of a person other than the applicant.** [Emphasis added]*

CSR Rinker's requests for permit modification do not represent a substantial modification to the project. In fact, the requests make no modification to:

- Production equipment
- Production or process rates
- Air pollution control equipment
- Fuel types permitted by applicable regulation and/or Permit No. 0250014-002-AC
- Fuel usage rates permitted by Permit No. 0250014-002-AC
- Emission limits
- Compliance testing requirements

It is inconceivable to me how these minor permit changes could be construed as being "reasonably expected to cause new or greater adverse environmental impacts upon the substantial interests of a person other than the applicant".

My opinion is supported by the conclusion of the Technical Evaluation and Preliminary Determination, dated February 5, 1998, for the Draft Air Construction Permit Modification, which states:

The conclusion of the Department is that the changes requested by RMC can be made with no impacts on air quality beyond those addressed in the original Technical Evaluation and Preliminary Determination. [Emphasis added]

Your comments and certain comments of your staff lead me to believe that the Department is requesting an additional public notice per Chapter 62-103.150(2)(a)2., F.A.C., which states:

The Department shall require other applicants to publish a Notice of Intent to Issue where the Department finds that the project is reasonably expected to result in a heightened public concern or likelihood of request for administrative proceedings because of the project's size, potential effect on the environment or natural resources, controversial nature or location.

This basis is also not applicable. The "other applicants" are applicants for permits other than construction permits or Title V permits. The modification of permit conditions is the project at this time – not the overall cement plant modernization project. As such, this project's size is miniscule and no potential effects on the environment or natural resources are expected from this project.

Likewise, there has been no indication to me that this project is of a controversial nature. It must be noted that no comments were received after the proper public noticing of air construction permit no. 0250014-002-AC from:

- U.S.E.P.A.
- National Park Service
- Dade County DERM
- The public

The location of this project is not at issue – the permit modification is for the same location as the approved permit. The cement plant modernization project represents the replacement of two wet-process cement kilns installed in 1958 with a single preheater/precalciner dry process kiln, at the existing site. To my knowledge, the preheater/precalciner dry process kiln is the most technologically advanced type of cement plant used in the world at this time.

For these reasons, CSR Rinker does not believe that an additional public notice is warranted for the permit modification project.

Thank you for your review and consideration of this letter. If I can provide any further information, please contact me. If you would like to meet to discuss this letter, the permit modification project, or the cement plant modernization project, please contact me to schedule a meeting.

Sincerely,



Steven C. Cullen, P.E.
Koogler & Associates

attachments

copies w/attachments to: Scott Benyon – CSR Rinker
 Clair Fancy – FDEP DARM
 Howard Rhodes – FDEP DARM
 Mike Vardeman – CSR Rinker
 Jake Varn -- Steel, Hector et al

cc: J. Newk, BAR
 J. Kahn, BAR
 EPA
 NPS
 Dade Co.
 SETD

CHANGE NO.	SUBJECT	BASIS	INITIATED BY
1	Applicable Requirements Removal of inapplicable citation	40 CFR 60.50b(p)	CSR Rinker
2	Fuel Combustion Allow supplemental fuels from off-site as requested in permit application	Permittee Request	CSR Rinker
3	Fuel Combustion Addition of restrictive limits with inapplicable basis	40 CFR 60.50b(b)	Department
4	Fuel Combustion Removal of kiln outlet temperature requirement	Permittee Request Equipment Constraints	CSR Rinker
5	Fuel Combustion Addition of applicable rule requirement	40 CFR 279.10(b)(1)(ii)	CSR Rinker
6	Continuous Emissions Monitoring Computation of Daily Average	62-710.700, F.A.C.	CSR Rinker
7	Continuous Emissions Monitoring Use of continuous stack gas flow monitor vs. F factors	Permittee Request F Factors Inappropriate	CSR Rinker
8	Recordkeeping & Reporting Addition of requirements for solid waste	40 CFR 60.50b(b)	Department
9	Recordkeeping & Reporting Addition of requirements for solid waste	Good Faith	CSR Rinker
10	Solid Waste Specific Conditions Tire Handling	Permittee Request	CSR Rinker
11	Solid Waste Specific Conditions Allow used oil/filters from off-site as requested in permit application	Permittee Request	CSR Rinker

CSR Rinker Materials Corporation
CHANGES TO EXISTING PERMIT NO. 0250014-002-AC

Page 1 of 10

Change #1

Page 5 of 17: This cement plant is subject to the applicable requirements of the New Source Performance Standards (NSPS) and the National Emissions Standards for Hazardous Air Pollutants (NESHAP)...including:

DELETE:

- 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)

JUSTIFICATION:

The referenced NSPS Subpart is not applicable to this facility. Subpart Eb, at 40 CFR 60.50b(p), states:

Cement kilns firing municipal solid waste are not subject to this subpart.

[See Attachment 1-A]

IS THIS CHANGE ADDRESSED BY PERMIT NO. 0250014-006-AC?:

This inapplicable condition is not removed by 0250014-006-AC. However, see Specific Condition B.20.B.(1), which requires recordkeeping not required by 0250014-002-AC.

Change #2

Page 6 of 17: B. 5 **Fuel Combustion**, B.5(1)c.

FROM:

Combustion of non-hazardous solid waste, oil filters, booms and rags from spill cleanup, generated on site. This non-hazardous solid waste material shall be used as a supplemental fuel not as a start-up fuel.

TO:

~~Combustion of n~~Non-hazardous solid waste, oil filters, booms and rags from spill cleanup, ~~generated on site~~ and sludge from publicly owned facilities. This non-hazardous solid waste material shall only be used as a supplemental fuel not as a start-up fuel.

JUSTIFICATION:

Throughout the permitting process, it has been the intention of Rinker to include as fuels, non-hazardous solid waste, oil filters, booms and rags from spill cleanup generated both on-site and off-site. It has never been the intention of Rinker to have these materials limited to on-site generated materials.

IS THIS CHANGE ADDRESSED BY 0250014-006-AC?:

Yes – the Department reviewed this request, and reworded the specific condition as shown above.

Change#3

Page 6 of 17: B. 5 Fuel Combustion, B.5(1)d.

NO CHANGE

JUSTIFICATION:

No changes were requested or deemed necessary for this Specific Condition. This condition, which specifies the use of non-hazardous solid waste at up to 30% of total heat input, was duly publicly noticed.

IS THIS CHANGE ADDRESSED BY PERMIT NO. 0250014-006-AC?:

Yes -- the Department has reworded this condition. This change is of concern for the following reasons:

- No changes were requested for this condition
- The changes reference an inapplicable rule – 40 CFR 60, Subpart Eb (see Change #1)
- The changes are unduly restrictive, reducing heat input from these materials from the permitted amount of 131 MMBtu/hr to less than 12 MMBtu/hr!

In May 1997 (prior to the issuance of the Notice of Intent to Issue Permit 0250014-002-AC), Koogler & Associates provided additional justification for why NSPS Subpart Eb was inapplicable and specified that municipal waste would comprise less than 30% of the plant's fuel feed stream. This information is as follows:

NSPS Subpart Eb

This subpart is *Standards of Performance for Municipal Waste Combustors*, and the affected facility per 40 CFR 60.50b is "each municipal waste combustor unit".

The definition of municipal waste found at 42 USC 7429, Section 129(g)(5) is directly applicable and reads in pertinent part:

"...unit shall not be considered to be combusting municipal waste for purposes of section 111 [NSPS]...if it combusts a fuel feed stream, 30 percent or less of the weight of which is comprised, in aggregate, of municipal waste."

Rinker will limit the input of materials classified as municipal waste to less than 30% by weight of the plant's fuel feed stream. By so doing, the referenced NSPS subpart is inapplicable.

CSR Rinker Materials Corporation
CHANGES TO EXISTING PERMIT NO. 0250014-002-AC

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Change #4

Page 7 of 17: B. 5 Fuel Combustion, TIRES, B.5(4)

FROM:

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.

TO:

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.~~

JUSTIFICATION:

This condition requires that the gases exiting the kiln be maintained at an outlet temperature of at least 1750°F (during steady-state operating conditions and be achieved within six hours of kiln start up). It is doubtful that the temperature at the exit of the kiln will reach 1750°F during normal operations. Rinker is of the opinion that this condition is unnecessary and would further point out that similar conditions have not been imposed on other cement plants in Florida which are permitted to burn tire derived fuel. Therefore, Rinker requests that the final sentence of Section B.5.(4) be deleted.

The following justification is from the Department's Technical Evaluation and Preliminary Determination, dated February 5, 1998: [See Attachment 1-B]

The request to delete the 1750 degree exit temperature condition is acceptable. These temperature requirements are logical for preheater kilns that do not have a precalciner. In such cases it is possible for materials introduced into the kiln shelf to be incompletely combusted without such temperature requirements. The RMC kiln has a precalciner as mentioned above. Although the purpose is to calcine raw materials prior to their entry into the kiln, the device will insure that gases exiting the kiln will be reheated to a sufficiently high temperature without requiring a temperature limit at the kiln exit. [Emphasis added]

IS THIS CHANGE ADDRESSED BY PERMIT NO. 0250014-006-AC?:

Yes – the Department reviewed this request, and reworded the specific condition as shown above.

CSR Rinker Materials Corporation
CHANGES TO EXISTING PERMIT NO. 0250014-002-AC

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Change#5

Page 7 of 17: B. 5 Fuel Combustion, USED OIL, B.5(5)

FROM:

The constituents and properties of the *on-spec used oil* shall comply with the following allowable concentration levels, as stipulated and defined in 40 CFR 279.10 (July 1, 1996), which is adopted by reference in **Rule 62-730.181, F.A.C.**

Constituent/Property	Allowable Concentration
Cadmium	2 ppm maximum
Arsenic	5 ppm maximum
Chromium	10 ppm maximum
Lead	100 ppm maximum
Total Halogens	1000 ppm maximum
Flash Point	140° F minimum
Polychlorinated Biphenyls	Less than 2 ppm

TO:

The constituents and properties of the *on-spec used oil* shall comply with the following allowable concentration levels, as stipulated and defined in 40 CFR 279.10~~1~~ (July 1, 1996), which is adopted by reference in **Rule 62-730.181, F.A.C.**

Constituent/Property	Allowable Concentration
Cadmium	2 ppm maximum
Arsenic	5 ppm maximum
Chromium	10 ppm maximum
Lead	100 ppm maximum
Total Halogens	1000 ppm maximum
Flash Point	140 100° F minimum
Polychlorinated Biphenyls	Less than 2 ppm

Rinker has the option of having a total halogen concentration in the *on-specification used oil* of up to 4,000 ppm. The 4000 ppm limit is authorized by 40 cfr 279.10(b)(1)(ii) if Rinker can demonstrate that the used oil does not contain halogens in excess of 1000 ppm as a result of the mixture of a hazardous waste. In the event that Rinker accepts such oil, Rinker shall demonstrate that the used oil does not contain hazardous waste (for example, by using an analytical method from SW-846, Edition III, to show that the used oil does not contain significant concentrations of halogenated hazardous constituents listed in appendix VIII of part 261 of 40 CFR chapter I.

JUSTIFICATION:

Please note that the citation for used oil specifications is 40 CFR 279.11, not 40 CFR 279.10.

CSR Rinker Materials Corporation
CHANGES TO EXISTING PERMIT NO. 0250014-002-AC

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This condition limits the total halogens in on-specification used oil to 1,000 ppm, maximum. Rinker requests the option of having a total halogen concentration in the on-specification used oil of up to 4,000 ppm. The 4,000 ppm limit is authorized by 40 CFR 279.10(b)(1)(ii) if Rinker can demonstrate that the used oil does not contain halogens in excess of 1,000 ppm as a result of the mixture of a hazardous waste. Increasing the total halogens limit of the on-specification used oil fuel should pose no problem as Rinker is authorized to burn off-specification used oil with a higher halogen content anyway.

The following justification is from the Department's Technical Evaluation and Preliminary Determination, dated February 5, 1998:

The Department will allow use of on-specification used oil containing up to 4000 ppm as long as Rinker can demonstrate that the excess halogens did not result from mixing hazardous waste into such oil. This is authorized by 40 CFR 279.10(b)(1)(ii). Use of such oil and the amounts used are already authorized through existing permits for the wet process plant where wasting of cement kiln dust is not prohibited. To an extent, some chlorides tie up alkali metals as potassium and sodium salts. From a practical point of view, use of oil with high chlorides will be limited by the need to meet cement specifications with no wasting of cement kiln dust and the need to control buildups of deposits on preheater and other surfaces. Dioxin formation potential is minimized by the very high temperatures of combustion followed by low temperatures required for baghouse operation.

IS THIS CHANGE ADDRESSED BY PERMIT NO. 0250014-006-AC?:

Yes – the Department reviewed this request, and reworded the specific condition as shown above.

Change#6

Page 9 of 17: CONTINUOUS EMISSIONS MONITORING SYSTEM (CEMS), B.11, third paragraph.

FROM:

For compliance with the emission limits in Table 1-2, the daily average shall not include data from periods of startup when no clinker is being produced. However, emissions during startup periods shall not exceed the pound per hour limits in Table 1-2. Data recorded during periods of shutdown, malfunction, load change, and continuous operating periods shall be included in the daily average.

TO:

For compliance with the emission limits in Table 1-2, the daily average shall not include data from periods of startup when no clinker is being produced. ~~However, emissions during startup periods shall not exceed the pound per hour limits in Table 1-2. Data recorded during periods of shutdown, malfunction, load change, and continuous operating periods shall be included in the daily average.~~ Also, emission data from periods

CSR Rinker Materials Corporation
CHANGES TO EXISTING PERMIT NO. 0250014-002-AC

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that meet the requirements of Rule 62-210.700, F.A.C. shall not be included in the calculation of the daily average emission rate.

JUSTIFICATION:

The requirements in the third paragraph of Specific Condition B.11 are inconsistent with Department rules. This condition is in conflict with Department rule 62-210.700, F.A.C. that is included as Common Specific Condition (CSC) 3.4 of Permit No. 0250014-002-AC. The Department rule and CSC 3.4 authorize excess emissions during start-up, shutdown or malfunction provided, among other conditions, that best operating practices are adhered to.

Based upon Department rule, it is requested that the third paragraph of Specific Condition B.11 be reworded as shown above.

IS THIS CHANGE ADDRESSED BY PERMIT NO. 0250014-006-AC?:

No – this change was requested in the March 3, 1998 letter from Koogler & Associates.

Change#7

Page 9 of 17: **CONTINUOUS EMISSIONS MONITORING SYSTEM (CEMS),**
B.11, sixth paragraph.

FROM:

Mass emission rates (lb/hr and lb/ton clinker) shall be calculated based on source specific and fuel specific F factors calculated using 40 CFR 60 Appendix A, Method 19. These F factors shall be recalculated when fuel properties vary significantly from those used in the previously calculated F factors but not less than once per year.

TO:

~~Mass emission rates (lb/hr and lb/ton clinker) shall be calculated based on source specific and fuel specific F factors calculated using 40 CFR 60 Appendix A, Method 19. These F factors shall be recalculated when fuel properties vary significantly from those used in the previously calculated F factors but not less than once per year.~~

The calculation of mass emission rates based on CEM data will incorporate data generated by a continuous stack gas flow monitor (CSGFM). This CSGFM shall be installed and certified, before the initial performance test, and calibrated, maintained and operated in compliance with 40 CFR 60, Appendix B, Performance Specification 6. Annual relative accuracy (RA) tests shall be conducted on the stack gas flow monitoring system.

JUSTIFICATION:

The last paragraph of this condition requires the use of F factors for calculating mass emission rates of sulfur dioxide and nitrogen oxides from CEM data. The use of a F factor for calculating emissions from a portland cement plant is not appropriate as the F factor calculation procedure presumes that all carbon in the stack gas is a result of carbon in the

fuel. In portland cement plants, a significant fraction of carbon in the stack gas (as carbon dioxide) is present as a result of the calcining of limestone.

The calculation of mass emission rates based on CEM data will incorporate data generated by a continuous stack gas flow monitor. As a result, the use of a F factor, even if appropriate, will not be necessary. As a result, the last paragraph of Section B.11 should be deleted.

IS THIS CHANGE ADDRESSED BY 0250014-006-AC?:

Yes – the Department reviewed this request, and reworded the specific condition as shown above.

Change#8

Page 11 of 17: **Recordkeeping and Reporting Requirements, B.20, Tires**

NO CHANGE

JUSTIFICATION:

No changes were requested or deemed necessary for this Specific Condition. This condition, which specifies the reporting and recordkeeping requirements related to tires as supplemental fuel, was duly publicly noticed.

IS THIS CHANGE ADDRESSED BY PERMIT NO. 0250014-006-AC?:

Yes -- the Department has significantly reworded this condition by adding a Section B that specifies the reporting and recordkeeping requirements related to solid wastes as supplemental fuel. This change is of concern for the following reasons:

- No changes were requested for this condition
- The changes reference an inapplicable rule – 40 CFR 60, Subpart Eb (see Change #1)

However, Rinker is not opposed to recordkeeping and reporting requirements related to solid wastes as supplemental fuel. Please see Change #9 for suggested wording and numbering.

Change#9

Page 13 of 17: **Recordkeeping and Reporting Requirements, B.23**

FROM:

Scrivener's Error: The permit specific condition numbering goes from B.22 on page 12 of 17, to B.24 on page 13 of 17. No Specific Condition B.23 was identified.

TO:

B.23 In order to document compliance with Specific Conditions B.5(1)c. and B.5(1)d. **Solid Wastes**, the following requirements shall be adhered to as a minimum:

- (1) Recordkeeping when burning the solid waste specified in Specific Condition

CSR Rinker Materials Corporation
CHANGES TO EXISTING PERMIT NO. 0250014-002-AC

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- B.5(1)c. shall be in compliance with Specific Condition B.5(1)e. Records of the amount of solid waste fired shall be kept on a daily basis.
- (2) Recordkeeping when burning non-hazardous municipal solid waste specified in Specific Condition B.5(1)d. shall be in compliance with Specific Condition B.5(1)d. and Specific Condition B.5(1)e. Records of the amount of municipal solid waste fired shall be kept on a daily basis.

JUSTIFICATION:

Although not specified in or required by Permit No. 0250014-002-AC, it is clearly the Department's intent to impose additional conditions related to solid wastes as supplemental fuel.

Rinker is not opposed to recordkeeping and reporting requirements related to solid wastes as supplemental fuel. However, the imposition of more restrictive limits on such use than specified in Permit No. 0250014-002-AC or as specified in applicable requirements is not acceptable.

The following text is from the Department's Technical Evaluation and Preliminary Determination, dated February 5, 1998:

*A new Specific Condition B.5(1)d. will be added to clarify the Department's intent regarding the burning of municipal solid waste. This condition is based on the NSPS, Subpart Eb, 40 CFR 60, Subpart Eb, Section 60.50b., Applicability and Delegation of Authority. Section (b) of this paragraph states: "Any waste combustion unit at a medical, industrial, or other type of waste combustor plant that is capable of combusting more than 35 megagrams per day of municipal solid waste and is subject to a federally enforceable permit limiting the plantwide maximum amount of municipal solid waste that may be combusted to less than or equal to 10 megagrams per day is not subject to Subpart Eb if the owner or operator: (1) Notifies the Administrator of an exemption claim; (2) Provides a copy of the federally enforceable permit that limits the firing of municipal solid waste to less than 10 megagrams per day; and (3) **Keeps records of the amount of municipal solid waste fired on a daily basis**". [Emphasis added]*

DISCUSSION:

In May 1997 (prior to the issuance of the Notice of Intent to Issue Permit 0250014-002-AC), Koogler & Associates provided additional justification for why NSPS Subpart Eb was inapplicable and specified that municipal waste would comprise less than 30% of the plant's fuel feed stream. This information is as follows:

NSPS Subpart Eb

This subpart is *Standards of Performance for Municipal Waste Combustors*, and the affected facility per 40 CFR 60.50b is "each municipal waste combustor unit".

CSR Rinker Materials Corporation
CHANGES TO EXISTING PERMIT NO. 0250014-002-AC

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The definition of municipal waste found at 42 USC 7429, Section 129(g)(5) is directly applicable and reads in pertinent part:

"...unit shall not be considered to be combusting municipal waste for purposes of section 111 [NSPS]...if it combusts a fuel feed stream, 30 percent or less of the weight of which is comprised, in aggregate, of municipal waste."

This information was considered by the Department, and certain solid wastes were limited to 30% of total heat input by Specific Condition B.5(1)d. of Permit No. 0250014-002-AC. The 10 megagrams per day exemption was inapplicable in May 1997, as the proposed plant did not even fit the definition of a "municipal waste combustor".

Subsequently, NSPS Subpart Eb was modified on August 25, 1997 (effective October 24, 1997). 40 CFR 60.50b(p), was added and states unequivocally:

Cement kilns firing municipal solid waste are not subject to this subpart.

To be responsive to the Department's intent with respect to recordkeeping, Rinker proposes Specific Condition B.23 as stated above.

IS THIS CHANGE ADDRESSED BY PERMIT NO. 0250014-006-AC?:

Yes – see Change #8

Change#10

Page 14 of 17: **Solid Waste Specific Conditions, B.30**

FROM:

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.

TO:

The Permittee shall not place waste tires on the ground. Waste tires shall be received in closed vans and stored in the vans until fed ~~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.~~

JUSTIFICATION:

The scrap tires will be received in enclosed vans and stored in these vans until they are fed into the tire feeding mechanism of the cement plant. There is no opportunity for the tires to be exposed to rain during storage and to accumulate rainwater. As a result, the requirement to spray the tires with insecticide is unnecessary. Furthermore, the introduction of an insecticide onto the tires will introduce an undesirable constituent into the process.

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It should be noted that this condition was considered and deleted from a permit for another cement plant recently permitted in Florida for the reasons cited above.

The following justification is from the Department's Technical Evaluation and Preliminary Determination, dated February 5, 1998:

The request to delete the requirement to spray tires with insecticide is acceptable. It is now possible to obtain dry tires in closed vans and to keep them dry until they are fed into the kiln shelf. Deleting the requirement, means that the insecticide will not contribute to formation of air toxics such as hydrogen chloride or dioxins and furans. The affected Specific Condition B.30 will be revised accordingly.

IS THIS CHANGE ADDRESSED BY PERMIT NO. 0250014-006-AC?:

Yes – the Department reviewed this request, and reworded the specific condition as shown above.

Change#11

Page 15 of 17: Solid Waste Specific Conditions, B.36

FROM:

The Permittee shall manage used oil and used oil filters generated at the facility in compliance with Rule 62-710, F.A.C. and 40 CFR 279.12.

TO:

The Permittee shall manage used oil and used oil filters generated or received at the facility in compliance with ~~Rule~~ Chapter 62-710, F.A.C. and 40 CFR 279.12~~10~~.

JUSTIFICATION:

Please note that the citation addressing handling of materials containing used oil is 40 CFR 279.10, not 40 CFR 279.12.

IS THIS CHANGE ADDRESSED BY PERMIT NO. 0250014-006-AC?:

Yes – the Department reviewed this request, and reworded the specific condition as shown above.

Subpart Eb—Standards of Performance for Large Municipal Waste Combustors for Which Construction Is Commenced After September 20, 1994 or for Which Modification or Reconstruction Is Commenced After June 19, 1996

[Subpart Eb added at 60 FR 65419, Dec. 19, 1995; heading revised at 62 FR 45120, Aug. 25, 1997, effective Oct. 24, 1997]

40 CFR 60.50b Applicability and delegation of authority.

(a) The affected facility to which this subpart applies is each municipal waste combustor unit with a combustion capacity greater than 250 tons per day of municipal solid waste for which construction is commenced after September 20, 1994 or for which modification or reconstruction is commenced after June 19, 1996.

[§60.50b(a) revised at 62 FR 45120, Aug. 25, 1997, effective Oct. 24, 1997]

(b) Any waste combustion unit that is capable of combusting more than 250 tons per day of municipal solid waste and is subject to a federally enforceable permit limiting the maximum amount of municipal solid waste that may be combusted in the unit to less than or equal to 11 tons per day is not subject to this subpart if the owner or operator:

[§60.50b(b) introductory text revised at 62 FR 45120, Aug. 25, 1997, effective Oct. 24, 1997]

(1) Notifies the EPA Administrator of an exemption claim;

[§60.50b(b)(1) amended at 62 FR 45125, Aug. 25, 1997, effective Oct. 24, 1997]

(2) Provides a copy of the federally enforceable permit that limits the firing of municipal solid waste to less than 11 tons per day; and

[§60.50b(b)(2) amended at 62 FR 45120, Aug. 25, 1997, effective Oct. 24, 1997]

(3) Keeps records of the amount of municipal solid waste fired on a daily basis.

(c) An affected facility to which this subpart applies is not subject to subpart E or Ea of this part.

(d) Physical or operational changes made to an existing municipal waste combustor unit primarily for the purpose of complying with emission guidelines under subpart Cb are not considered a modification or reconstruction and do not result in an existing municipal waste combustor unit becoming subject to this subpart.

(e) A qualifying small power production facility, as defined in section 3(17)(C) of the Federal Power Act (16 U.S.C. 796(17)(C)), that burns homogeneous waste (such as automotive tires or used oil, but not including refuse-derived fuel) for the production of electric energy is not subject to this subpart if the owner or operator of the facility notifies the EPA Administrator of this exemption and provides data documenting that the facility qualifies for this exemption.

[§60.50b(e) amended at 62 FR 45125, Aug. 25, 1997, effective Oct. 24, 1997]

(f) A qualifying cogeneration facility, as defined in section 3(18)(B) of the Federal Power Act (16 U.S.C. 796(18)(B)), that burns homogeneous waste (such as automotive tires or used oil, but not including refuse-derived fuel) for the production of electric energy and steam or forms of useful energy (such as heat) that are used for industrial, commercial, heating, or cooling purposes, is not subject to this subpart if the owner or operator of the facility notifies the EPA Administrator of this exemption and provides data documenting that the facility qualifies for this exemption.

[§60.50b(f) amended at 62 FR 45125, Aug. 25, 1997, effective Oct. 24, 1997]

(g) Any unit combusting a single-item waste stream of tires is not subject to this subpart if the owner or operator of the unit:

(1) Notifies the EPA Administrator of an exemption claim; and

[§60.50b(g)(1) amended at 62 FR 45125, Aug. 25, 1997, effective Oct. 24, 1997]

(3) Provides data documenting that the unit qualifies for this exemption.

(h) Any unit required to have a permit under section 3005 of the Solid Waste Disposal Act is not subject to this subpart.

(i) Any materials recovery facility (including primary or secondary smelters) that combusts waste for the primary purpose of recovering metals is not subject to this subpart.

(j) Any cofired combustor, as defined under §60.51b, that meets the capacity specifications in paragraph (a) of this section is not subject to this subpart if the owner or operator of the cofired combustor:

[§60.50b(j) introductory text amended at 62 FR 45126, Aug. 25, 1997, effective Oct. 24, 1997]

(1) Notifies the EPA Administrator of an exemption claim;

[§60.50b(j)(1) amended at 62 FR 45125, Aug. 25, 1997, effective Oct. 24, 1997]

(2) Provides a copy of the federally enforceable permit (specified in the definition of cofired combustor in this section); and

(3) Keeps a record on a calendar quarter basis of the weight of municipal solid waste combusted at the cofired combustor and the weight of all other fuels combusted at the cofired combustor.

(k) Air curtain incinerators, as defined under §60.51b, located at a plant that meet the capacity specifications in paragraph (a) of this section and that combust a fuel stream composed of 100 percent yard waste are exempt from all provisions of this subpart except the opacity limit under §60.56b, the testing procedures under §60.58b(l), and the reporting and recordkeeping provisions under §60.59b(e) and (i).

(l) Air curtain incinerators located at plants that meet the capacity specifications in paragraph

(a) of this sectioncombusting municipal solid waste other than yard waste are subject to all provisions of this subpart.

(m) Pyrolysis/combustion units that are an integrated part of a plastics/rubber recycling unit (as defined in §60.51b) are not subject to this subpart if the owner or operator of the plastics/rubber recycling unit keeps records of the weight of plastics, rubber, and/or rubber tires processed on a calendar quarter basis; the weight of chemical plant feedstocks and petroleum refinery feedstocks produced and marketed on a calendar quarter basis; and the name and address of the purchaser of the feedstocks. The combustion of gasoline, diesel fuel, jet fuel, fuel oils, residual oil, refinery gas, petroleum coke, liquified petroleum gas, propane, or butane produced by chemical plants or petroleum refineries that use feedstocks produced by plastics/rubber recycling units are not subject to this subpart.

(n) The following authorities shall be retained by the Administrator and not transferred to a State: None.

(o) This subpart shall become effective June 19, 1996.

(p) Cement kilns firing municipal solid waste are not subject to this subpart.

[§60.50b(p) added at 62 FR 45120, Aug. 25, 1997, effective Oct. 24, 1997]

**TECHNICAL EVALUATION
AND
PRELIMINARY DETERMINATION**

**RINKER MATERIALS CORPORATION
MIAMI, DADE COUNTY, FLORIDA**

**Portland Cement Manufacturing Facility
Modernization and Expansion Project
Revision of Solid Waste Conditions**

Permit No. 0250014-006-AC

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

February 5, 1998

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

Rinker Materials Corporation
Portland Cement Manufacturing Facility

Permit No. 0250014-003-AC
Facility ID No.: 0250014

I. APPLICANT NAME AND ADDRESS

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

II. FACILITY INFORMATION

A. FACILITY LOCATION

Rinker Materials Corporation (RMC) plans to modernize 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 areas in Dade County. The USGS Hialeah SW quadrangle map, and a map of the Everglades National Park were compared. The northeast corner of the Park, bounded by U.S. 41 to the North and Levee No.31N to the east, is the nearest point to the Rinker facility. The UTM coordinates of this facility are Zone 17, 558.20 East and 2851.20 km North.

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 facility is classified as a major air pollutant emitting facility. As proposed, the revised project is not subject to New Source Review including provisions for the Prevention of Significant Deterioration of air quality (PSD) because the proposed modernized plant will result in less air pollution than the existing plant. This is primarily due to the lower fuel requirements per unit of product characteristic of the dry processes. Although there will be an increase in cement production capacity as a result of the proposed project, there will be a reduction in the emissions of most air pollutants.

Emissions decreases or less than significant increases with respect to PSD are expected for the following pollutants in tons per year (TPY): -108 TPY of sulfur dioxide (SO₂), +11.8 TPY of nitrogen oxides (NO_x), +9.8 TPY of particulate matter (PM), -163.3 TPY of particulate matter smaller than 10 microns (PM₁₀), +57.6 TPY of carbon monoxide (CO), +32.9 TPY of volatile organic compounds (VOC), and -13.4 TPY of sulfuric acid mist (SO₃). Slight reductions or insignificant increases are also expected in emissions of lead (Pb), mercury (Hg), and beryllium (Be).

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

Rinker Materials Corporation
Portland Cement Manufacturing Facility

Permit No. 0250014-003-AC
Facility ID No.: 0250014

III. PROJECT DESCRIPTION

The Department issued a permit to RMC 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 proposed modernized cement plant will be designed to 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.

The currently permitted Rinker facility consists of a quarry, limestone crushing system, material receiving facilities both by rail and truck, open short-term material storage piles, a storage building for intermediate raw material and clinker storage, a soil dryer, two raw mills, kiln feed slurry system, two kilns, two coolers, five finish mills, four pack houses, thirty cement silos, a rail and truck bulk loadout facility, and, a liquid fuel tank farm.

The proposed plant modernization will include limestone crushing, limestone premixing and storage, raw grinding, blending and kiln feed, pyroprocessing, clinker storage, coal grinding, and additional finish mill and cement transport to existing silos. The existing quarry operation, soil dryer, five finish mills, packhouses, and , cement silos will remain in operation.

Equipment changes resulting from the change in kiln technology and plant modernization consist of the following:

- A new primary crushing facility will be constructed.
- A new raw materials handling system
- A new raw mill system and new raw meal handling and storage equipment will be constructed
- The existing two wet process cement kiln will be replaced with a single dry process kiln with a preheater and a precalciner
- The existing two clinker coolers will be replaced with a new single clinker cooler
- New clinker handling and storage equipment will be constructed
- A new coal/coke preparation system will be constructed. This will allow indirect firing of coal/coke.

The main raw materials will be limestone, clay, ash, iron ore from various sources and gypsum.

IV. PROCESS DESCRIPTION

A complete process description provided in the Technical Evaluation and Preliminary Determination issued for the modernization project on June 23, 1997.

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

Rinker Materials Corporation
Portland Cement Manufacturing Facility

Permit No. 0250014-003-AC
Facility ID No.: 0250014

V. FUEL CONSUMPTION

The main fuels to be burned in the kiln are coal and petroleum coke. Tires will also be burned as supplemental fuel for the heat and iron content. No. 2 fuel oil, residual fuel oil, on-spec and off-spec used oil will be used for startup and as supplemental fuels. The applicant proposes to use gas at any time. There are no plans to burn hazardous wastes. Solid waste materials such as booms and rags from spill cleanup, unused diapers, paper products, non-chlorinated plastic waste, and sewage sludge from Publicly Owned Treat Works (POTW). Tires and solid waste will not exceed 40 percent of the heat input value at any time.

Startup of the proposed cement kiln will be accomplished with oil or gas. Oil and gas will be combusted first at low utilization rates. Cold start-up requires approximately 24 hours until the kiln is ready to receive feed. Since oil or gas utilization rates during the entire startup period are less than fuel consumption rates at normal operating conditions and no product or coal is introduced to the kiln, emissions during start up period should be less than emissions under normal operation. No coal or product will be introduced into the kiln until optimum operating conditions are attained. Like the start-up period, coal and product feed begins at reduced rates, ramping up gradually to the final operating conditions.

Tires will not be fed until the kiln is hot enough to support proper combustion and the temperature maintained high enough to destroy dioxins and furans.

The revision in technology will add one primary emission source, the precalciner (PC). Fuel burned in the PC offsets some of the fuel requirement of the kiln. This new source of combustion is integral in the preparation of the raw material feed and the cement clinker production. The combined gross heat input to the PC and the kiln is 437 MMBtu/hr, to be fired on coal, natural gas, and/or tires or tire-derived fuel (start-up with natural gas, fuel oil, and/or on-spec used oil).

VI. PERMIT CHANGES REQUESTED

The changes requested by RMC are primarily related to the fuel use discussion above and to various operation parameters. The requested changes or clarifications are:

- That burning of non-hazardous solid waste, oil filters, booms and rags from spill cleanup, not be limited to items generated on site. The company wishes to burn the same materials from off-site generators.
- That the kiln exit temperature requirement of 1750 °F be deleted.
- That the halogen limit for on-specification used oil be increased from 1000 to 4000 ppm.
- Required use of an "F factor" to calculate combustion gas volume be replaced with the flow rate from a Continuous Stack Gas Flow Monitor (CSGFM).
- Deletion of requirement to spray tires with insecticides.

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

Rinker Materials Corporation
Portland Cement Manufacturing Facility

Permit No. 0250014-003-AC
Facility ID No.: 0250014

VII. EVALUATION

A complete rule analysis was provided in the original Technical Evaluation and Preliminary Determination. The present analysis deals with rule applicability associated with the requested changes.

The materials described including the non-hazardous solid waste, oil filters, booms and rags from oil spills are readily destroyed at the very high kiln temperatures. Additionally, the precalciner is another combustion point which acts much like an afterburner by further incinerating incompletely burned gases emanating from the kiln. Metals from the combusted wastes are readily incorporated into the clinker. The low particulate emission limit, use of a baghouse and requirement to recycle all cement kiln dust will insure that excessive amounts of these materials or any other wastes will not be burned.

A new Specific Condition B.5 (1)d., will be added to clarify the Department's intent regarding the burning of municipal solid waste. This condition is based on the NSPS, Subpart Eb, 40 CFR 60, Subpart Eb, Section 60.50b., Applicability and Delegation of Authority. Section (b) of this paragraph states: "Any waste combustion unit at a medical, industrial, or other type of waste combustor plant that is capable of combusting more than 35 megagrams per day of municipal solid waste and is subject to a federally enforceable permit limiting the plantwide maximum amount of municipal solid waste that may be combusted to less than or equal to 10 megagrams per day is not subject to Subpart Eb if the owner or operator: (1) Notifies the Administrator of an exemption claim; (2) Provides a copy of the federally enforceable permit that limits the firing of municipal solid waste to less than 10 megagrams per day; and (3) Keeps records of the amount of municipal solid waste fired on a daily basis".

The Department will allow use of on-specification used oil containing up to 4000 ppm as long as Rinker can demonstrate that the excess halogens did not result from mixing hazardous waste into such oil. This is authorized by 40 CFR 279.10(b)(1)(ii). Use of such oil and the amounts used are already authorized through existing permits for the wet process plant where wasting of cement kiln dust is not prohibited. To an extent, some chlorides tie up alkali metals as potassium and sodium salts. From a practical point of view, use of oil with high chlorides will be limited by the need to meet cement specifications with no wasting of cement kiln dust and the need to control buildups of deposits on preheater and other surfaces. Dioxin formation potential is minimized by the very high temperatures of combustion followed by low temperatures required for baghouse operation.

The request to delete the 1750 degree kiln exit temperature condition is acceptable. These temperature requirements are logical for preheater kilns that do not have precalciner. In such cases it is possible for materials introduced into the kiln shelf to be incompletely combusted without such temperature requirements. The RMC kiln has a precalciner as mentioned above. Although the purpose is to calcine raw materials prior to their entry into the kiln, the device will insure that gases exiting the kiln will be reheated to a sufficiently high temperature without requiring a temperature limit at the kiln exit.

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

Rinker Materials Corporation
Portland Cement Manufacturing Facility

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Facility ID No.: 0250014

The request to delete the requirement to spray tires with insecticide is acceptable. It is now possible to obtain dry tires in closed vans and to keep them dry until they are fed into the kiln shelf. Deleting the requirement, means that the insecticide will not contribute to formation of air toxics such as hydrogen chloride or dioxins and furans. The affected Specific Condition B.30 will be revised accordingly.

VIII CONCLUSION

The conclusion of the Department is that the changes requested by RMC can be made with no impacts on air quality beyond those addressed in the original Technical Evaluation and Preliminary Determination.



Department of Environmental Protection

Lawton Chiles
Governor

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

April 10, 1998

Virginia B. Wetherell
Secretary

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. James S. Jenkins, III
Vice President of Cement Operations
Rinker Materials Corporation
1200 Northwest 137th Avenue
Miami, Florida 33182

Re: DRAFT Permit Modification No. 0250014-006-AC
Modernization Project, Revisions of Permit Conditions

Dear Mr. Jenkins:

On February 11, 1998 the Department sent you a Draft Air Construction Permit Modification for the cement plant reconstruction project. The package included the Department's Intent to Issue Air Construction Permit Modification, the DRAFT Permit Modification, and the "Public Notice of Intent to Issue Air Construction Permit Modification.

The Public Notice should have been published within 30 days and proof submitted to the Department within 7 days thereafter. Neither of these items has been received to-date. No petition or request of an extension of time to file for a petition has been received either.

We did receive on March 4 from your consultant, Koogler and Associates, a letter requesting various changes in the draft modification and a request to not provide public notice. We understand that a key Federal Standard that was applied to sources (including cement plants) burning municipal solid waste was revised to exempt cement plants. This occurred after publication of the Public Notice for the modernization project. The request to remove all provisions of the Federal Standard was not made in the September 26 and November 3, 1997 requests to revise the permit, but rather in the aforementioned response we received on March 4 of this year.

Rather than denying the permit application for failing to publish the Notice within 30 days, perhaps the best solution would be to rescind the package we sent you on February 11 and treat the letter from Koogler and Associates as additional information essentially resetting the permit clock. Therefore presuming the application is "complete" as of March 4, 1998, we propose to issue a revised Intent by the end of May and address all comments therein. We will confirm in that package whether or not public notice is required. Generally it is required for anything but very minor corrections. It is also required to insure that changes in certain permit requirements, like deletion of the kiln exit temperature, are recognized by the EPA.

Mr. James S. Jenkins, III
April 10, 1998
Page 2 of 2

We will contact Mr. Vardeman shortly to visit the plant and gain a better understanding of the precise plans covering the burning and reporting of the various solid waste streams now that the Federal Standard has exempted cement plants from the municipal solid waste rules and reporting requirements.

If you have any questions regarding this matter, please contact me or Mr. Joe Kahn at (850)488-1344.

Sincerely,



A. A. Linero, P.E. Administrator
New Source Review Section

AAL/aal/l

cc: Brian Beals, EPA
Patrick Wong, DERM
Isadore Goldman, DEP
Mike Vardeman, RMC
John Koogler, P.E.

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- Complete items 1 and/or 2 for additional services.
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- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
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- 1. Addressee's Address
- 2. Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
 Mr. James Jenkins, III
 Vice Pres. of Cement Operations
 Lenker Materials
 1200 NW 137th Ave
 Miami, FL 33182

4a. Article Number
 P 265 659 331

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PS Form 3811, December 1994

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TOTAL Postage & Fees	\$
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PS Form 3800 April 1995