Department of Environmental Protection

Lawton Chiles
Governor

Marjory Stoneman Douglas Building
3900 Commonwealth Boulevard
Tallahassee, Florida 32399-3000

Virginia B. Wetherell
Secretary

July 7, 1997

Mr. Louis Molina
10731 Southwest 117 Place
Miami, Florida 33196

Dear Mr. Molina:

Thank you for your June 6 letter about a permit application for Rinker Materials to burn contaminated materials. I apologize for the delay in responding to your earlier letter, but I thought it had been handled.

The Rinker facility includes a cement plant, a soil treatment unit and an asphalt plant. There are a number of current permitting actions, which are explained below.

The details in your letter are about the solid waste permit for the soil treatment unit, which the department's Southeast District Office in West Palm Beach issued. Your concerns, however, involved air quality issues. In May, the Dade County Department of Environmental Resources Management, on behalf of the county and the state, issued an air permit for the soil treatment unit. By copy of this letter, I am asking Dade County to follow up on the questions you raised in your letter and to also send you a copy of any further permitting actions at the soil treatment unit. Dade County is also reviewing a separate application to burn used oil at the soil treatment unit.

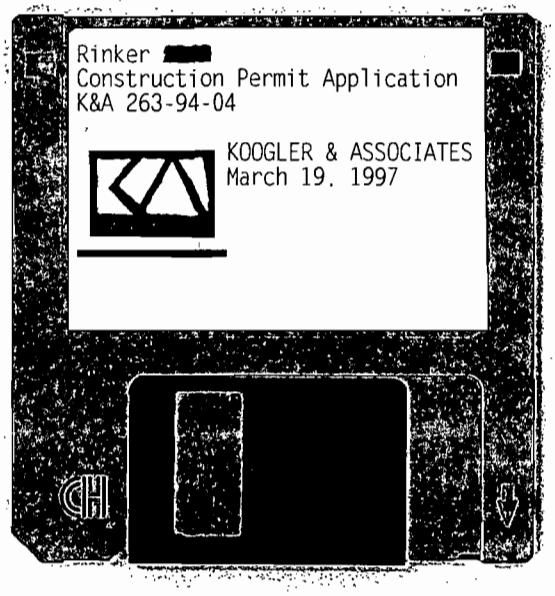
The department's Division of Air Resources Management is reviewing a different permit application. This one is to replace the existing cement plant with a more efficient, modern and less polluting one. By copy of this letter, I am asking the air division to send you a copy of the department's Intent for this application so that you may provide them with your comments.

If you have any air pollution questions about the soil treatment unit, please call Ms. Eva Kunath of Dade County at 305/372-6925. If you have any questions about the cement plant modernization project, please call Ms. Teresa Heron of this department's Division of Air Resources Management at 850/488-1344. If you have any solid waste questions, please call Mr. Joe Lurix of this department's Southeast District Office at 407/681-6600.

Sincerely,

F. Perry Odom
General Counsel

PO/alk
cc: Patrick Wong/Eva Kunath, Dade County
Clair Fancy/Teresa Heron, DEP, Division of Air
Joe Lurix/Isidore Goldman, DEP, SED


Rinker [redacted]
Construction Permit Application
K&A 263-94-04
KOOGLER & ASSOCIATES
March 19, 1997

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD 5505
TALLAHASSEE, FLORIDA 32399-2400

CERTIFIED

P 265 659 233

MAIL

RECEIVED

JUL 21 1997

DIVISION OF AIR
RESOURCES MANAGEMENT

UNCLAIMED

Mr. Louis Molina
10731 SW 117th Place
Miami, FL 33196

NAME
1st Notice 7-9
2nd Notice 7-12
Return

Sylvia, N.o.t OAPCO

Is your RETURN ADDRESS completed on the reverse side?

SENDER:

- Complete items 1 and/or 2 for additional services:
- Complete items 3, 4a, and 4b.
- 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.
- Write *"Return Receipt Requested"* on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

Mr. Louis Molina
10731 SW 117th Place
Miami, Fl
33196

4a. Article Number

P 265 659 233

4b. Service Type

- ☐ Registered
- ☒ Certified
- ☐ Express Mail
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- ☐ COD

7. Date of Delivery

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X

PS Form **3811,** December 1994

Domestic Return Receipt

Thank you for using Return Receipt Service.

To ~~Carol~~ Howard Rhodes and see if he knows of such a letter also, ask Howard to ask appropriate person to draft a reply for my signature.
6/12/97

June 6, 1997

Mr. Perry Odum
General Counsel
Florida Department of Environmental Regulation
3900 Commonwealth Blvd.
Tallahassee, Fl 32399

Dear Mr. Odum:

I wrote a letter to your department on April 17, 1997 concerning the application of a permit by Rinker Materials to burn additional contaminated materials and I have not received any response of any kind. I feel my questions were legitimate and merited a response. I have spoken to several people who live in the area and none of them are aware of any contaminated and maybe hazardous materials having been incinerated in their neighborhood. If their permit was obtained by publishing notice in an obscure publication that is not read by the general public, I can understand how this has been going on without anyone knowing.

I feel that if the people in the surrounding area know about these activities they would be greatly alarmed and would question your agency's actions. The mere fact that it was published in an obscure publication and I have not gotten any response would indicate to me that our well being and concerns must be insignificant.

I recently learned that a similar type facility was not allowed to incinerate contaminated materials in Alachua County. Why did your agency not issue these permits? Was it simply that the people in that area were aware of what was going to happen and objected to it, as opposed to here, where I am confident in stating that the people in this area do not know?

Keeping all of this in mind I do not only question the new permit but the old one as well. My questions regarding these permits are:

1. How often is the air quality tested? If the waste being burned changes from day to day shouldn't it be tested on a regular basis?
2. Are all incoming materials tested before and after they come through the plant?
3. Does your agency have access to these tests and could the plant burn something that could release something like carcinogens or mercury into the atmosphere without your knowledge?
4. What are the long term effects of burning some of these wastes and exposure to the end products they put these materials in?

I have not hired an attorney to represent me because as an individual citizen I look to your agency to protect the health and well being of the public. Something of this magnitude should be well known to everyone it could effect, having been published in the Miami Herald and not the little-read **Miami Business Review**. Again, my primary concern is the health of my children and at the very least they should receive the same consideration and respect as the people of Alachua County. We feel this needs to be looked at in a careful manner and should we need an attorney, we would be prepared to ask other concerned parents at the school and other people that we make aware of this matter to assist in obtaining one.

Sincerely,

Louis Molina
10731 SW 117th Place
Miami, Fl 33196

6/17 "Unpublished
-phone #"
Directory Assistance
MIAMI

Clair / al
Sent to Perry w/ copy to Joe L
6/19
Pat

EARTH DAY '96

6/19/97

Perry - Attached is a letter that you sent to Howard Rhodes to check out and draft a reply for you. Howard is out of the office, so Al Linero (Bureau of Air Regulation 8-1344) checked on this permit.

To Rinker File
al

Mr. Molina had originally written to the department on 4/17. In response to this, Jeff Brown filed an "Order Dismissing Petition with Leave to Amend" on 5/14. Mr. Molina wrote again on 6/6 because he felt as though he had not received a reply to his first letter.

The Rinker permit is a solid waste permit. Joe Lurix in the Southeast District Waste Program (SUNCOM 226-6669) would have information about it.

Since this is not an air permit, we weren't sure how you wanted us to handle it. Please let us know if we need to do anything else.

Thanks,

Pat Kennedy
8-0114

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

LOUIS MOLINA,

Petitioner,

vs. OGC Case No. 97-805

RINKER MATERIALS CORPORATION and the STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION,

Respondent.
_____/

ORDER DISMISSING PETITION WITH LEAVE TO AMEND

On April 21, 1997, the Florida Department of Environmental Protection (Department) received a letter that could be considered as a request for administrative hearing from Petitioner Louis Molina. See Exhibit 1. The Petitioner challenged the Department's decision to issue a permit (Permit No. SO13-300512), to construct and operate a solid waste management facility in Dade County. Florida Administrative Code Rule 62-103.155(2) and the notice provided to Petitioner explain what must be included in a petition for a formal administrative proceeding. Petitioner's letter petition does not comply with rule 62-103.155(2) and therefore does not contain sufficient information to determine whether a formal administrative proceeding should be held. Specifically, the request does not include:

Post-it® Fax Note 7671	Date 6/19/97	# of pages ▶ 6
To Kim Tober	From Marjam Monahan	
Co./Dept. DARM	Co. OGC	
Phone # 488-1344	Phone # 921-9682	
Fax # 922-6979	Fax # 921-3000	

(a) A statement of how and when each Petitioner received notice of the Department's action or proposed action;

(b) A statement of the material facts (i.e., those facts upon which the Department's action or proposed action is based) disputed by Petitioner, if any;

(c) A statement of the facts that Petitioner contends warrant reversal or modification of the Department's action or proposed action; or

(d) A statement of which rules or statutes Petitioner contends require reversal or modification of the Department's action or proposed action.

Without this information, Petitioner's letter petition must be dismissed as required by Florida Administrative Code Rule 62-103.155. Therefore, IT IS ORDERED:

The petition for hearing filed by Louis Molina is DISMISSED. Such dismissal is without prejudice to Louis Molina to amend his petition to provide the information listed above. The amended petition must be filed (received) in the Office of General Counsel, Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000, within 15 days from the date set forth in the certificate of service on the last page of this order. This order constitutes final agency action of the Department unless a timely amended petition is filed in conformance with this order.

Any party to this order has the right to seek judicial review of the order under section 120.68 of the Florida Statutes by the filing of a notice of appeal under rule 9:110 of the Florida Rules of Appellate Procedure with the clerk of the Department in the Office of General Counsel, 3900 Commonwealth Boulevard, Mail Station 35, 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 of appeal must be filed within 30 days from the date this order is filed with the clerk of the Department.

DONE AND ORDERED this 13th of May 1997 in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION

F. Perry Odom

F. PERRY ODOM
General Counsel

3900 Commonwealth Boulevard
Mail Station 35
Tallahassee, FL 32399-3000
Telephone: (904) 488-1554

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

Rebecca Poe
CLERK

5/14/97
DATE

CERTIFICATE OF SERVICE

I CERTIFY that a true copy of the foregoing was mailed to Louis Molina, 10731 S.W. 117th Place, Miami, Florida 33196; to Peter Breton, P.O. Box 3588, West Palm Beach, Florida 33402-3888; to Geoff Smith, 204 S. Monroe Street, Tallahassee, Florida 32301 and to Michael D. Vardeman, Cement Division, Environmental Manager, Rinker Materials Corporation, 1200 N.W. 137th Avenue, Miami, Florida 33182 on this 14 day of May 1997.

Jeffrey Brown
Assistant General Counsel

3900 Commonwealth Boulevard
Mail Station 35
Tallahassee, FL 32399-3000
Telephone: (904) 488-9730

EXHIBIT "1"

April 17, 1997

Agency Clerk - Kathy Carter
Department of Environmental Protection
Office of General Council

RE: Issuance of Permit #6013-300512

Dear Ms. Carter:

It is my understanding that Rinker Materials has applied for a permit modification for their incinerator in Dade County which has me very concerned. I have two children that go to school less than five miles from their facility and I am worried about the effect on the air quality in the area.

I have heard that their permit requires that they test their emissions only once per year. I feel these emissions should be checked on a regular basis and without their knowing about the test being done ahead of time.

I think that all the material they bring in for treatment should be checked to make sure it will not be harmful to the air quality once it is burned. The material should also be tested after it is burned to make sure it is safe for the environment.

The facility is located in a very populated area and I am very concerned about how it will affect my children and other people.

I would like to know that my concerns have been addressed before any additional permits are issued.

Sincerely,

Louis Molina
10731 S. W. 117th Place
Miami, FL 33196

6-10-1997 3:47PM FROM OFFICE DEPOT-35 305+388+00539 P. 1

Office DEPOT

Office Products at Warehouse Prices!

BUSINESS CENTER

FAX TRANSMISSION

TO: Perry Odom

FROM: Louis Molina

FAX NUMBER: 904 487-4938

SENDER'S PHONE:

DATE: 6/10/97

TOTAL NUMBER OF PAGES: 3
(Including Cover Sheet)

If You Have Any Difficulties With This Transmission, Please Contact The Sender At The Phone Number Listed Above.

Message/Comment: Re: Rinker Permit

Yo - Please find out who previous letter was referred to and when, so I can follow up on this asap.

PO
6/11/97

Bob Hewitt [illegible] 6/11/97 9:35

Store Information

Office Depot #35
8950 S.W. 137 Ave.
Miami, Fl 33186
(305) 388-0041

BEST AVAILABLE COPY

To: CLAIR 6/16

DEP ROUTING AND TRANSMITTAL SLIP

TO: (NAME, OFFICE, LOCATION)

1. Howard Rhodes
2. ______
3. ______
4. ______
5. ______

PLEASE PREPARE REPLY FOR:	COMMENTS:
____ SECRETARY'S SIGNATURE	Mr. Rhodes:
____ DIV/DIST DIR SIGNATURE	
____ MY SIGNATURE	Please see
____ YOUR SIGNATURE	written note.
____ DUE DATE ______	Call me if
ACTION/DISPOSITION	You have any
____ DISCUSS WITH ME	questions
____ COMMENTS/ADVISE	Thank you!
____ REVIEW AND RETURN	
____ SET UP MEETING	
✓ FOR YOUR INFORMATION	
✓ HANDLE APPROPRIATELY	
____ INITIAL AND FORWARD	
____ SHARE WITH STAFF	
____ FOR YOUR FILES	

FROM: Y. Waters DATE: 6/13/97 PHONE: 1-9670

DEP 15-026 (12/93)

Dade Co.
305/372-6921

Joe Lurix
SED/Waste
SC 226-6669

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

March 24, 1997

Mr. Al Linero
Administrator, NSR Section
FDEP -- Division of Air Resources
2600 Blair Stone Road
Tallahassee, FL 32399-2400

SUBJECT: Rinker Materials Corporation -- Miami Cement Plant
FDEP File No. 0250014-002-AC
Response to Request for Additional Information of December 31, 1996

Dear Mr. Linero:

This letter shall respond to the referenced Request for Additional Information. Also, please find enclosed a disk which contains the permit application in ELSA.

GENERAL

1. Pursuant to Rule 62-212.400(2)(e), F.A.C., please recalculate the net emission increases (sum of all 5 year contemporaneous creditable increases and decreases in the actual emissions of the facility) for all affected PSD pollutants listed in Table 62-212.400-2, F.A.C., to determine PSD applicability.

   Response: The net emissions increase for all the PSD pollutants are calculated below, using the methodology presented in the EPA document *New Source Review Workshop Manual* (October 1990).

   Step 1: Determine the emissions increases from the proposed project.

Pollutant	Increase (TPY)	PSD Threshold (TPY)
Carbon Monoxide =	1807	100
Nitrogen Oxides =	3350	40
Sulfur Dioxide =	1531	40
Particulate Matter (PM) =	353	25
Particulate Matter (PM10) =	285	15
Volatile Organics (VOC) =	72	40
Lead =	0.045	0.6
Asbestos =	Not Applicable	0.007
Beryllium =	0.000396	0.0004
Mercury =	0.014	0.1
Vinyl Chloride =	Not Applicable	1
Fluorides =	0.54	3
Sulfuric Acid Mist =	8.4 as SO_3	7
Hydrogen Sulfide/TRS =	Not Applicable	10

Therefore, further review is necessary for CO, NOX, SO2, PM, PM10, VOC and SAM.

Step 2: Determine the beginning and ending dates of the contemporaneous period as it relates to the proposed modification.

The application to construct was received by the Department on December 4, 1996, and deemed incomplete on December 31, 1996. As of this writing (March 24, 1997) the application is still incomplete. Rule 62-212.400(2)(e)3., FAC, states that the contemporaneous period is:

"...the period beginning five years prior to the date on which the owner or operator of the of the facility submits a complete application for a permit to modify the facility and ending on the date on which the owner or operator of the modified facility projects the new or modified emissions unit(s) to begin operation."

Therefore the contemporaneous window is defined by:

Beginning Date ~March 24, 1992
Ending Date ~April 1, 2000

Step 3: Determine which emissions units at the source have experienced an increase or decrease in emissions during the contemporaneous period.

Increases

Emissions Unit 014: Stone Dryer/Soil Thermal Treatment Unit
Certification of Completion of Construction for AC13-187599A = June 25, 1993
Compliance testing: November 18-19, 1992
Nature of Modification: To allow processing of contaminated soils in existing stone dryer.

Pollutant	PTE (TPY)	ACTUAL 1992 (TPY)	Δ
Carbon Monoxide =	9.2	0.85	8.4
Nitrogen Oxides =	27.8	4.73	23.1
Sulfur Dioxide =	40.2	5.47	34.7
Particulate Matter (PM) =	4.4	1.64	2.8
Particulate Matter (PM10) =	4.4	1.64	2.8
Volatile Organics (VOC) =	24.0	6.13	17.9

Emissions Unit 008: Kiln #1
AC13-213153 issued June 9, 1993 and AO13-233208 issued July 29, 1993

Nature of Modification: To allow the burning of tires in Kiln #1.
Comments: FDEP Final Determination states:

"...there was no demonstrated increase in actual pollutant emissions..."

No contemporaneous creditable increases or decreases are associated with this permit amendment.

Emissions Unit (No Corresponding ID): Portable Crushing Unit
Compliance testing for completion of construction for 7770250-001/002-AC = April 12, 1996.
Nature of Modification: The construction and operation of a new portable crushing unit for use at this facility and other Rinker facilities.

Pollutant	PTE (TPY)
Carbon Monoxide =	7.0
Nitrogen Oxides =	32.6
Sulfur Dioxide =	2.1
Particulate Matter (PM) =	20.7
Particulate Matter (PM10) =	5.5
Volatile Organics (VOC) =	2.6

Decreases

Emissions Units 008 & 009: Kilns #1 & #2
Nature of Decrease: The issuance of the AC for the proposed project will shutdown the existing kilns in a federally-enforceable manner.

Pollutant	1995	1996	Average
Carbon Monoxide =	1739.78	1789.84	1764.81
Nitrogen Oxides =	4827.29	4966.17	4896.73*
Sulfur Dioxide =	1459.04	1510.65	1484.84
Particulate Matter (PM) =	126.6	118.73	122.66
Particulate Matter (PM10) =	107.6	100.92	104.26
Volatile Organics (VOC) =	46.97	48.32	47.64
Sulfuric Acid Mist =	21.65	21.88	21.77

*NOTE: See Step 4 for discussion of creditable decrease for NOX.

Emissions Units 010 & 011: Clinker Coolers #1 and #2
Nature of Decrease: The issuance of the AC for the proposed project will shutdown the clinker conveyor and clinker box in a federally-enforceable manner.

Pollutant	1995	1996	Average
Particulate Matter (PM) =	50.4	50.4	50.4
Particulate Matter (PM10) =	42.8	42.8	42.8

Emissions Units (No Corresponding ID): Clinker Conveyor/Clinker Box
Nature of Decrease: The issuance of the AC for the proposed project will shutdown the clinker conveyor and clinker box in a federally-enforceable manner.

Pollutant	1995	1996	Average
Particulate Matter (PM) =	8.96	9.22	9.09
Particulate Matter (PM10) =	7.61	7.83	7.72

Emissions Units (No Corresponding ID): Fugitive Emissions from Unpaved Roads
Nature of Decrease: The issuance of the AC for the proposed project will allow the construction of an in-pit crusher with belt conveying system. This will drastically reduce emissions from unpaved haul roads, as rock from the pit is currently hauled to the primary crusher at the plant by haul trucks.

This discussion uses an emissions inventory prepared for the 1992-1993 production period, and scaled with relation to clinker production.

Clinker Production for 1992-1993 = 534309 TPY
[PM = 377.51 TPY & PM10 = 135.9 TPY]
Clinker Production for 1995-1996 = 506166 TPY

Pollutant	Average, 1995-1996
Particulate Matter (PM) =	357.63
Particulate Matter (PM10) =	128.74

Step 4: Determine which emissions changes are creditable.

All of the above emissions changes are creditable, except some portion of the NOX decrease associated with the existing kilns. The RACT rule required compliance with the standard by May 31, 1995.

Fuel Type	1994 MMBtu	1995 MMBtu	1996 MMBtu
Coal	2126020	1119898	0
Coke	376038	770661	1850572
Tires	13994	40794	1805
Tot. Solid	2516052	1931353	1852378
Waste Oil	372695	486701	624672
Tot. Liquid	372695	486701	624672
Natural Gas	60730	50267	48862
TOTAL MMBTU	2949477	2468321	2525911

NOX was limited for 7/12 of 1995 (June - December):

5/12 x 4827.12 = 2011.3 TPY
2,468,321 MMBtu x 7/12 x 2.0 lb/MMBtu = 1439.9 TPY

Therefore, creditable NOX decrease for 1995 = 2011.3 + 1439.9 = 3451.2 TPY.

NOX was limited to 2.0 lb/MMBtu by the RACT rule for 8/12 of 1996 (January - August); and to 4.5 lb/MMBtu by the Consent Order (OGC 96-1751) for 4/12 of 1996 (September - December).

Creditable NOX decrease for 1996 = (8/12 x 2,525,911 MMBtu x 2.0 lb/MMBtu) + (4/12 x 2,525,911 MMBtu x 4.5 lb/MMBtu) = 1683.9 + 1894.4 = 3578.3 TPY.

Dade County Code 24-17 contains limits on SO2 emissions while burning solid fuels (1.5 lb/MMBtu) and liquid fuels (1.1 lb/MMBtu).

For 1995, allowable SO2 emissions would be:

[(1931353 MMBtu x 1.5 lb/MMBtu)/2000] + [(486701 MMBtu x 1.1 lb/MMBtu)/2000] = 1449 + 268 = 1717 TPY

As actual emissions were 1459 TPY, the entire decrease is creditable.

For 1996, allowable SO2 emissions would be:

[(1852378 MMBtu x 1.5 lb/MMBtu)/2000] + [(624672 MMBtu x 1.1 lb/MMBtu)/2000] = 1389 + 344 = 1733 TPY

As actual emissions were 1511 TPY, the entire decrease is creditable.

Step 5: Determine, on a pollutant-by-pollutant basis, the amount of each contemporaneous and creditable emissions increase and decrease.

Pollutant Increases (TPY)
Carbon Monoxide = 8.4 + 7.0 = 15.4
Nitrogen Oxides = 23.1 + 32.6 = 55.7
Sulfur Dioxide = 34.7 + 2.1 = 36.8
Particulate Matter (PM) = 2.8 + 20.7 = 23.5
Particulate Matter (PM10) = 2.8 + 5.5 = 8.3
Volatile Organics (VOC) = 17.9 + 2.6 = 20.5
Sulfuric Acid Mist = 0 + 0 = 0

Pollutant Decreases (TPY)
Carbon Monoxide = 1764.8
Nitrogen Oxides = 3578.3
Sulfur Dioxide = 1484.8
Particulate Matter (PM) = 122.7 + 50.4 + 9.1 + 357.6 = 539.8
Particulate Matter (PM10) = 104.3 + 42.8 + 7.7 + 128.74 = 283.5
Volatile Organics (VOC) = 47.6
Sulfuric Acid Mist = 21.8

Step 6: Sum all contemporaneous and creditable increases and decreases with the increase from the proposed modification to determine if a significant net emissions increase will occur.

Sum of Contemporaneous Creditable Changes (TPY)	PSD Threshold (TPY)
Example = Modification + Increases - Decreases = Total	
Carbon Monoxide = 1807 + 15.4 - 1764.8 = 57.6	100
Nitrogen Oxides = 3350 + 55.7 - 3578.3 = -172.6	40
Sulfur Dioxide = 1531 + 36.8 - 1484.8 = 83	40
Particulate Matter (PM) = 353 + 23.5 - 539.8 = -163.3	25
Particulate Matter (PM10) = 285 + 8.3 - 283.5 = 9.8	15
Volatile Organics (VOC) = 72 + 20.5 - 47.6 = 44.9	40
Sulfuric Acid Mist = 8.4 + 0 - 21.8 = -13.4	7

The detailed analysis above shows that there will be significant net emissions increases for SO2 and VOC. In order to avoid PSD applicability, the requested allowable emission rates for SO2 and VOC from the proposed modification are reduced as follows:

SO2: 0.7 lb/MMBtu, 305.9 lb/hr, 1339.8 TPY; net emissions change = -108.2 TPY
VOC: 0.1 lb/ton clinker, 13.7 lb/hr, 60 TPY; net emissions increase = 32.9 TPY

Replacement pages for the application are included as Attachment 1.

2. Pursuant to Rule 62-212.400(2)(d)4.(ii), F.A.C., if the facility to be modified is within 10 km of a Class I area and if the proposed modification results in a net emission increase (as set forth in Rule 62-212.400(2)(e)1., F.A.C.) of any pollutant regulated under the Act, which increase would have an impact on the affected *Class I area* equal to or greater than 1.0 microgram per cubic meter (24-hour average), this modification shall be subject to the preconstruction review requirements of the PSD

regulations. Calculate the impact of any emission increase on the Everglades National Park.

Response: The USGS Hialeah SW quadrangle map , and a map of the Everglades National Park (obtained from Park staff 2/11/1997) were reviewed. 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 distance between the Rinker facility and the Park was determined to be 8.2 kilometers.

It is noted that the main stack height (other parameters are unchanged) has been changed from 130 feet to approximately 330 feet, as this main stack will be alongside the preheater tower. However, the GEP stack height of 65 meters (213 feet) was used in the dispersion modeling. This is a conservative analysis, because the increased stack height will effectively reduce ambient concentrations.

The net emissions increases for CO, PM10, and VOC were used for the emission rate parameter in dispersion modeling runs using the SCREEN2 model. The impacts resulting from the net emissions increases were determined to be less than 1.0 microgram per cubic meter (24-hour average) at the Park boundary, as follows:

CO concentration at 8.2 km = 0.58 $\mu g/m^3$, 24-hour average
VOC concentration at 8.2 km = 0.33 $\mu g/m^3$, 24-hour average
PM10 concentration at 8.2 km = 0.10 $\mu g/m^3$, 24-hour average

Therefore, no PSD review is required for these pollutants or for this project.

3. Does this facility comply with the Dade County air pollution control regulations?

Response: This facility complies with the Dade County air pollution control regulations found at Chapter 24 of the Code of Metropolitan Dade County ("Code"). Specifically, the Code limits SO2 emissions from solid and liquid fuels, as follows:

SO2 emission standard for solid fuels = 1.5 lb/MMBtu
SO2 emission standard for liquid fuels = 1.1 lb/MMBtu

See the discussion of SO2 in Step 4 of the Response to question 1, above.

EMISSION UNIT NO. 1

4. Explain the proposed reasonable precautions taken to minimize proposed fugitive emissions from unpaved roads (357.43 TPY (actual) vs. 31.91 TPY (proposed)). Please refer to Appendix 2 of application.

Response: The reduction in unconfined particulate matter ("UPM") emissions from unpaved roads will result from physical modifications to the configuration of the limerock delivery system. The majority of the reduction will be from the elimination of certain haul road segments and the corresponding reduction in annual vehicle-miles traveled.

As currently configured, uncrushed rock is hauled, via haul truck, from the quarry to the primary crusher located at the cement plant. As proposed, the primary crusher will be located in the quarry pit, with crushed rock delivered to the cement plant via overland belt conveyor; this physical change will greatly reduce UPM by significantly reducing the use of internal haul roads by haul truck traffic.

5. Estimate fugitive emissions from emission unit No. 1, Raw Materials Handling, (unloading of produced and purchased materials from truck and conveyor systems)

Response: Particulate emissions generated by drop operations were estimated using AP-42, fifth edition, Section 13.2.4, *Aggregate Handling and Storage Piles*, Equation (1).

$$E = \frac{k \times (0.0032) \times [U/5]^{1.3}}{[M/2]^{1.4}}$$

where:

E = emission factor, lb/ton
k = particle size multiplier, 1.0 for PM and 0.35 for PM10
U = mean wind speed, mph; 9.3 mph for Miami per TANKS 3.0
M = material moisture content, %; assumed as 10% for this facility

Therefore,

$$E_{PM} = \frac{1.0 \times (0.0032) \times [9.3/5]^{1.3}}{[10/2]^{1.4}} = 0.0007 \text{ lb/ton}$$

$$E_{PM10} = \frac{0.35 \times (0.0032) \times [9.3/5]^{1.3}}{[10/2]^{1.4}} = 0.0003 \text{ lb/ton}$$

Raw material for the cement plant is required at 220 tons/hour and 8760 hours/year, which equals 1,927,200 TPY of raw material handled. Using the above emission factors, the unconfined particulate matter emissions resulting from drop operations are calculated as:

PM = 0.0007 lb/ton x 1,927,200 TPY = **0.7 TPY**
PM10 = 0.0003 lb/ton x 1,927,200 TPY = **0.3 TPY**

This information supports the contention on pages 28 and 31 of the application that fugitive PM/PM10 emissions will be "negligible due to material moisture".

6. What are the components (metals, halogens, PCBs) of the waste soil listed in page 20 of the application?

Response: The waste soil listed in page 20 is soil that has been thermally processed in the facility's soil thermal treatment facility, which is operating in compliance with Department permit AO13-234126, under Rule 62-775, FAC.

The metal concentrations in the soil accepted by the facility cannot exceed the limits of Specific Condition 11 of Permit AO13-234126 and Table I of Rule 62-775.400(3), FAC, as follows:

Table I, Rule 62-775.400(3)		
Metals	**TCLP*, mg/l**	**Total, mg/kg**
Arsenic	5.0	10
Barium	100.0	4940
Cadmium	1.0	37
Chromium	5.0	50
Lead	5.0	108
Mercury	0.2	23
Selenium	1.0	389
Silver	5.0	353

The halogen content (as Volatile Organic Halocarbons, VOH) of the treated soil is limited to 50 µg/mg (50 ppb) by Rule 62-775.400(2)(b).

The PCB content of the pretreatment soil is limited to 10 ppm by Rule 62-775.410(6)(a), FAC. PCB emissions from the soil thermal treatment facility are further limited to 154 pounds/year by Specific Condition 13 of Permit AO13-234126.

7. Provide documentation to ensure that materials proposed for use in the industrial process are non-hazardous.

Response: None of the materials proposed for use as raw materials or fuels in the cement manufacturing process are hazardous wastes per 40 CFR 261, *Identification and Listing of Hazardous Waste*. A characterization of a given material as a hazardous waste requires that the material be a solid waste, also defined in 40 CFR 261. The solid waste materials proposed for use at this facility include the following:

- Soil (post-treatment) from the soil thermal treatment facility. Rule 62-775.410(4), FAC, prohibits the thermal treatment of soil classified as hazardous waste.
- Fly (and bottom) ash, slag, staurolite, mill scale, gypsum and similar materials for use as raw materials, are certified by their generators to be non-hazardous.
- Used oil for use as fuel is regulated by 40 CFR 279, which exempts it from regulation under 40 CFR 261. Hence, used oil is not considered a hazardous waste.
- Other materials proposed for use as fuels (see Page 54 of the Application) are certified by their generators/suppliers, as applicable, to be non-hazardous.

8. Submit a detailed analysis of the components of all feedstreams. Indicate the precise mix proportion for the raw mill feed.

Response: The following table provides detailed analyses of typical raw materials for use at the facility, as well as ranges and typical mix proportions for the raw mill feed.

	RAW MATERIAL TYPE			
%	Limestone	Waste Soil	Mill Scale	Fly Ash
Carbon*	40.61	13.98	2.95	2.87
SiO_2	7.23	66.14	5.36	49.54
Al_2O_3	0.35	0.74	1.62	23.47
TiO_2	0.04	0.07	0.17	1.13
Fe_2O_3	0.23	0.47	84.12	15.58
Mn_2O_3	0.02	0.04	0.3	0.07
CaO	50.56	17.82	3.9	4.47
MgO	0.56	0.21	0.92	1.19
SO_3	0.07	0.15	0.14	0.14
P_2O_5	0.03	0.08	0.23	0.44
Na_2O	0.06	0.06	0.05	0.81
K_2O	0.06	0.09	0.09	2.04
Cl	0.01	0.08	0	0.02
*Carbon expressed as Loss on Ignition (LOI)				
% of Mix for Raw Mill Feed				
Range	83 - 91%	0 - 7%	0 - 2%	0 - 17%
Typical	86%	3%	1%	10%

PROCESS EVALUATION AND EMISSION UNIT NO. 2

9. Provide a manufacturer's certification that will confirm that the maximum design capacity of the kiln is 220 tons per hour of dry kiln feed.

Response: Equipment vendor and plant component selection has not yet been finalized. The requested certification will be provided when available, if required.

10. Please state the different operating rates that this facility will be use.

Response: The following table shows the different operating rates anticipated at this facility.

Process Description	Material Handled	Rate, TPH
Primary Crushing	Limestone, Overburden	1200
Raw Milling	Raw Materials	250
Preheater Feed	Raw Meal	220
Clinker Production	Clinker	137
Cement Production	Clinker, Gypsum, Limestone, Slag	204
Coal Milling	Coal, Petroleum Coke	20
Kiln Fuel Use	Coal, Pet. Coke, Fuel Oil, Tires, Other	437 mmBtu/hr

11. What is the "dry kiln feed rate" (40 CFR 60, Subpart F) and the "dry preheater feed".

Response: For the purposes of this application, dry kiln feed rate per 40 CFR 60, Subpart F, and dry preheater feed rate are considered equivalent; and equal to 220 TPH.

12. Explain how the fuels listed on pages 47 through 54 are going to be used (start up, main, supplementary or emergency fuels) and the proposed annual heat input usage (20%, 40%, etc.). If these fuels have been permitted before, list the permit number and state the specific condition that restricted fuel usage (rate, sulfur content, etc.).

Response: The following table provides the requested information.

FUEL	USE	% HEAT		PERMIT	RESTRICTIONS
		Prop.	1993-1996	AO13-233208	
Natural Gas	Startup, Supplemental	100	2 - 10%	Description a), SC 8	None
Coal	Main	100	0 - 74%	Description a), SC 8	None
Pet. Coke	Main	100	0 - 73%		
Propane	Supplemental	100	0%	Description a), SC 8	None
No. 2 Fuel Oil	Startup, Supplemental	100	0%	Description a), SC 8	Virgin Oil
Residual Oil	Supplemental	100	0%	Description a), SC 8	Virgin Oil
Used Oil	Supplemental	100	13 - 25%	Description a), SC 8	On or Off-Spec.
Tires, Other	Supplemental	40	1 - 2%	Description b), SC 8	Whole Tires, 40% of Heat

13. Provide reasonable assurance that the emissions of hazardous air pollutants (HAPs) will decrease. Refer to Page 1 of the REPORT.

Response: Reasonable assurance for the statement, *"There will be a reduction in the emissions of...most hazardous air pollutants (HAPs)..."* is derived from the anticipated reduction in fuel (coal, in particular) usage. It is expected that most of the

HAP emitted from the cement manufacturing process are a result of fuel combustion.

The permitted coal usage rate will decrease from 20 tons per hour (524 mmBtu/hr) to 17 tons per hour (437 mmBtu/hr).

14. a. Estimate the net increase or decrease pursuant to Rule 62-212.400(2)(e), F.A.C., for the non-criteria PSD pollutants (lead, mercury, beryllium, etc.) in tons per year. Show basis of calculations.

Response: See also Response #1.

Lead
Proposed Plant: AP-42, Table 11.6-9 Emission Factor = 7.5×10^{-5} lb/ton clinker
7.5×10^{-5} lb/ton x 1.2×10^{6} tons/yr x 1.0 ton/2000 lb = 0.045 TPY

Existing Plant: AP-42, Table 11.6-9 Emission Factor = 0.00071 lb/ton clinker
0.00071 lb/ton x 506,166 tons/yr x 1.0 ton/2000 lb = 0.18 TPY

Net Decrease = 0.135 TPY

Beryllium
Proposed Plant: AP-42, Table 11.6-9 Emission Factor = 6.6×10^{-7} lb/ton clinker
6.6×10^{-7} lb/ton x 1.2×10^{6} tons/yr x 1.0 ton/2000 lb = 0.0004 TPY

Existing Plant: AP-42, Table 11.6-9 Emission Factor = 6.6×10^{-7} lb/ton clinker
6.6×10^{-7} lb/ton x 506,166 tons/yr x 1.0 ton/2000 lb = 0.0002 TPY

Net Increase = 0.0002 TPY

Mercury
Proposed Plant: AP-42, Table 11.6-9 Emission Factor = 2.4×10^{-5} lb/ton clinker
2.4×10^{-5} lb/ton x 1.2×10^{6} tons/yr x 1.0 ton/2000 lb = 0.014 TPY

Existing Plant: AP-42, Table 11.6-9 Emission Factor = 0.00022 lb/ton clinker
0.00022 lb/ton x 506,166 tons/yr x 1.0 ton/2000 lb = 0.056 TPY

Net Decrease = 0.042 TPY

Fluorides
Proposed Plant: AP-42, Table 11.6-9 Emission Factor = 0.0009 lb/ton clinker
0.0009 lb/ton x 1.2×10^{6} tons/yr x 1.0 ton/2000 lb = 0.54 TPY

Existing Plant: AP-42, Table 11.6-9 Emission Factor = 0.0009 lb/ton clinker

0.0009 lb/ton x 506,166 tons/yr x 1.0 ton/2000 lb = 0.23 TPY

Net Increase = 0.31 TPY

Sulfuric Acid Mist
Proposed Plant: AP-42, Table 11.6-9 Emission Factor = 0.014 lb/ton clinker
0.014 lb/ton x 1.2 x 10^6 tons/yr x 1.0 ton/2000 lb = 8.4 TPY (as SO_3)

Existing Plant: AP-42, Table 11.6-9 Emission Factor = 0.086 lb/ton clinker
0.086 lb/ton x 506,166 tons/yr x 1.0 ton/2000 lb = 21.8 TPY (as SO_3)

Net Decrease = 13.4 TPY

b. No calculations were provided for the pollutants (VOC, HAPs, H106, PB, H017, and H150) mentioned on page 14 of the application.

Response: The pollutants were listed as facility pollutants according to the instructions for the Long Form. Please note that this section includes pollutant emissions from all facility emissions units. No calculations are required in this section of the form. In order to be responsive to your query, calculations for these pollutants are provided below.

VOC
Listed as a major pollutant (>100 TPY). The emissions are from the soil thermal treatment facility (Emissions Unit 14).

See AO13-234126, SC 12: Potential VOC emissions ≤ 22.8 lb/hr
@ 8760 hr/yr = 99.9 TPY

HAPS
Listed as a major pollutant (>25 TPY). The emissions are from the soil thermal treatment facility (Emissions Unit 14) and the cement kilns. See discussions for individual HAP above and below.

H106 = Hydrochloric Acid
Listed as a major pollutant (>10 TPY). The emissions are from the proposed project.
Proposed Plant: AP-42, Table 11.6-9 Emission Factor = 0.14 lb/ton clinker
0.14 lb/ton x 1.2 x 10^6 tons/yr x 1.0 ton/2000 lb = 84.0 TPY

H017 = Benzene
Listed as a major pollutant (>10 TPY). The emissions are from the proposed project.
Proposed Plant: AP-42, Table 11.6-9 Emission Factor = 0.016 lb/ton clinker
0.016 lb/ton x 1.2 x 10^6 tons/yr x 1.0 ton/2000 lb = 9.6 TPY

It is expected that the VOC emissions from the soil thermal treatment facility contain some amount of benzene; which would make this pollutant major.

Lead (PB)
Listed as a regulated pollutant, not major or synthetic minor. The lead emissions from the soil thermal treatment facility (Emissions Unit 14) are limited by permit condition. See AO13-234126, SC 4(D): Lead emissions ≤ 0.13 lb/hr @ 8760 hr/yr = 0.57 TPY

H150 = PCB
Listed as a regulated pollutant, not major or synthetic minor. The emissions from the soil thermal treatment facility (Emissions Unit 14) are limited by permit condition. See AO13-234126, SC 13: PCB emissions ≤ 154 lb/yr = 0.08 TPY

15. Submit any existing data for all other HAPs pollutants that have been tested at this facility in the past five years. Include dates, baseline conditions, production rates, and fuel burned.

Response: Please see Attachment 3: *Summary of Emission Rates: Baseline and Coal/TDF Firing Conditions,* January 1993.

16. Estimate fugitive emissions from petroleum storage activities.

Response: Rinker has in existence (2) 600,000 gallon tanks and (6) 25,000 gallon tanks for the storage of fuel oil (distillate, residual, or waste oil). The TANKS 3.0 model was used to estimate the fugitive VOC emissions from these tanks. The usage rate of waste oil in the kilns and in the soil thermal treatment facility for 1996 (5,330,901 gallons) was used as the throughput rate, and a single 1,350,000 gallon tank was input to the model. No. 2 fuel oil was selected as the product type with the greatest vapor pressure.

The model output is included as Attachment 4, and shows an expected VOC emission rate of 190 lb/year (0.1 TPY).

17. Are the proposed emissions based on the worst case scenario? What is the worst case scenario?

Response: The proposed emissions are based on the worst case scenario. The worst case scenario is defined by the *New Source Review Workshop Manual* as:

> *The worst case...emissions rate, which is based on the dirtiest fuels, and/or the highest emitting materials and operating conditions that the source is or will be permitted to use under federally-enforceable requirements.*

For this project, the highest emission fuels are coal and petroleum coke. The worst case operation scenario is the production of 137 tons/hour of clinker for 8760 hours/year.

18. Low pollutants rates are more typical a dry process kilns with a preheater and a precalciner. However, the proposed emission rates do not reflect the efficiency of this dry process. Please reevaluate your proposal and submit a more realistic pollutant emission rates that will reflect the efficiency of the proposed dry process.

Response: This project is not subject to PSD review or the application of BACT for any pollutant. The proposed heat input rate is reflective of the efficiency of the preheater/precalciner pyroprocessing system.

The emission rate for PM from the kiln is based on 0.2 lb/ton of dry feed. This rate is more stringent than NSPS, and is unrelated to kiln efficiency.

The emission rate for SO2, revised above in response to Question 1, is 0.7 lb/MMBtu. This equates to 2.2 lb/ton clinker. This is equivalent to the result obtained when a reasonable factor of safety of 2.0 is applied to the emission factor provided in AP-42, Table 11.6-8. This proposed emission rate is justifiable because of this plant's use of petroleum coke, which typically contains greater amounts of sulfur than does coal.

The proposed emission rate for NOX of 1.75 lb/MMBtu is based on Rinker's Consent Order commitment. This equates to 5.6 lb/ton of clinker. This is consistent with the range of NOX emissions for a preheater/precalciner kiln presented in *Alternative Control Techniques Document -- NOx Emissions from Cement Manufacturing,* of 0.9 lb/ton clinker to 7.0 lb/ton clinker.

The proposed emission rate for CO is 3.01 lb/ton of clinker. This is less than the emission factor of 3.7 lb/ton clinker for a preheater/precalciner kiln presented in AP-42, Table 11.6-8.

The emission rate for VOC, revised above in response to Question 1, is 0.1 lb/ton clinker. This is consistent with the emission factor provided in AP-42, Table 11.6-8, of 0.12 lb/ton of clinker.

19. Provide a detailed process flow diagram of the facility.

Response: Please see Attachment 5: Process Flow Diagram.

20. Describe good combustion practices that will be used to minimize NOx, CO and VOC emissions.

Response: The VOC emissions are expected in large part from naturally occurring organic material in the raw meal fed to the preheater. Very limited VOC emissions are expected from the combustion of fuels.

In the cement kiln environment, CO and NOX emissions are considered to be inversely related. NOX emissions from this plant will be minimized through indirect firing of coal and coke, and by the multiple firing points provided by the precalciner burner and the use of whole tires.

CO emissions will be minimized by the availability of excess oxygen in the combustion system.

21. Submit a detailed analysis of specifications and quantities of the different fuels to be burned at each combustion source at this facility. Discuss any blending of fuel types.

Response: Please see the response to Question 12 above. Typical specifications for coal, petroleum coke, waste oil, and fuel oil are included as Attachment 6. No blending of fuel types is proposed.

22. Describe how captured dust from the baghouse (kiln) is removed and disposed from the system (CKD handling system equipment). What precautions are used to minimize unconfined emissions while handling the dust?

Response: The collected dust is removed from the baghouse collection hopper by a screw conveyor and discharged through a rotary valve to a screw conveyor. This screw conveyor discharges into an airslide [F], through which the dust is transferred to a bucket elevator. The bucket elevator discharges through a flop gate with two outlets:

Outlet 1: To a 160-ton surge bin, then through a rotary valve to the airslide [F], and back to the bucket elevator.

Outlet 2: Through an airslide into the raw meal silo.

All of the material handling equipment is enclosed, and baghouses control particulate emissions from the transfer points.

23. Describe procedures used to startup and shutdown of the process equipment to minimize excess emissions.

Response: The air pollution control devices are operating prior to equipment startup, and remain operating for a short time after equipment shutdown.

Excess emissions from the pyroprocessing system during startup are minimized by kiln "warmup" procedures. Fuel oil is ignited and burned at the discharge end burner until the kiln operating temperature is reached, at which time fuel flow is started to the precalciner burner.

CONTROL EQUIPMENT AND EMISSIONS UNITS 3 AND 4

24. It is not clear from the description of the project if the baghouses to be used in the modernized plant are part of the existing operation. Are the baghouses described in page 24 of the application new?

Response: The application provided information only on proposed plant changes associated with this project.

The baghouses described in page 24 of the application are proposed for this project -- they are new, not part of the existing operation.

25. Are the proposed baghouses' particulate matter emissions calculated using a 0.01 gr/dscf emission rate (refer to last page of the application)? Calculate the flow (dscfm) for each baghouse. Show any estimates used in these calculations. Specify, if possible, the stack location in the process flow diagram.

Response: The proposed baghouses' (except the kiln/cooler/raw mill baghouse) particulate matter emissions are calculated using 0.01 grains per <u>actual</u> cubic foot -- not per dry standard cubic foot.

Temperature and moisture are assumed to approach standard conditions (20°C and 0% H_2O) for these process baghouses, therefore dry standard flow rate is approximately equivalent to actual flow rate.

It is expected that only the kiln/cooler/raw mill baghouse, the coal mill baghouse, and the new finish mill baghouse, will have typical stacks. These stacks are shown on the process flow diagram. The remaining baghouses will have vents with weather caps.

26. Emissions from proposed baghouses do not relate to that provided for plant components.

Response: Emissions Unit 1 includes 16 baghouses with a total flow rate of 157,500 acfm. These baghouses are identified in the table of baghouses as: 1, 2, 3, 4, 5, 7, 21, 22, 23, 24, 25, 26, 27, 28, 29, and 30. At the specified flow rate and 0.01 gr/acf, the annual PM emission is 59.1 TPY.

Emissions Unit 2 includes one baghouse -- the kiln/cooler/raw mill baghouse. Emissions from this baghouse are based on 0.2 lb/ton of dry feed, not a grain loading. In the table, this is baghouse 6. At the proposed feed rate, the annual PM emission is 192.7 TPY.

Emissions Unit 3 includes 13 baghouses with a total flow rate of 158,600 acfm. These baghouses are identified in the table of baghouses as: 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, and 20. At the specified flow rate and 0.01 gr/acf, the annual PM emission is 59.5 TPY.

Emissions Unit 4 includes 2 baghouses with a total flow rate of 26,700 acfm. These baghouses are identified in the table of baghouses as: 31 and 32. At the specified flow rate and 0.01 gr/acf, the annual PM emission is 10.0 TPY.

The application is consistent with the report, showing 32 baghouses and total process PM emissions of 321.4 TPY. Please see Attachment 7: Baghouse Table, to clarify this information.

27. Submit design specifications for the kiln and cooler stack transmissometers.

Response: The vendor for the kiln and cooler stack transmissometers has not yet been selected. The requested information will be supplied when available.

28. The detailed description of the control equipment (page 70 of the application) was not included. Include a detailed engineering design specification of the control devices (baghouses) used at this facility. Please include for each baghouse, as a minimum, the following information:

- Design emission rate for particulate matter (before and after proposed controls)
- Baghouse operation temperature (F) range
- Number of separate baghouses
- Number of isolated compartments per baghouses
- Design criteria for air to cloth ratio or range of acceptable ratios
- Cloth description
- Type of bag cleaning under consideration and subsequent cleaning controls
- Strategy for detecting and replacing faulty bags
- Description of ash handling and disposal system
- Nature and terms of performance guarantee

Response: The vendors for the baghouses have not yet been selected. The requested information will be supplied when available.

The flow rates are expected to be as described, and the design emission rate for 31 of the 32 baghouses will be 0.01 gr/acf. The number of separate baghouses is 32. The requested emission rates and operating conditions are not unusual -- it is expected that a number of qualified vendors with various baghouse designs will be involved with this project.

I trust that this letter is responsive to your request. If further information is required, please do not hesitate to contact me at (352) 377-5822.

Sincerely,

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

copies to: Mike Vardeman -- Rinker
Richard Donelan -- Carlton, Fields et al

Attachment 1: Replacement Application Pages for SO2
Attachment 2: SCREEN2 Modeling for CO, PM10, and VOC
Attachment 3: *Summary of Emission Rates: Baseline and Coal/TDF,* January 1993
Attachment 4: TANKS 3.0 Model Output
Attachment 5: Process Flow Diagram
Attachment 6: Typical Fuel Specifications
Attachment 7: Baghouse Table and Application Pages

ATTACHMENT 1

REPLACEMENT APPLICATION PAGES FOR SO2

Emissions Unit Information Section 2 of 4 [Kiln, Cooler, Raw Mill]

Pollutant Detail Information: Pollutant 4 of 5

1. Pollutant Emitted: **SO2**		
2. Total Percent Efficiency of Control: **NA**		%
3. Potential Emissions:	**305.90** lb/hour	**1339.8** tons/year
4. Synthetically Limited? [ ] Yes [**X**] No		
5. Range of Estimated Fugitive/Other Emissions: **NA** [ ] 1 [ ] 2 [ ] 3	_____ to _____	tons/year
6. Emission Factor: **0.7 lb/MMBtu** Reference: **Process Knowledge**		
7. Emissions Method Code: [**X**] 0 [ ] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5		
8. Calculation of Emissions (limit to 600 characters): **0.7 lb/MMBtu x 437 MMBtu hr = 305.90 lb/hr** **@ 8760 hrs/yr = 1339.8 tons/yr**		
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):		

Allowable Emissions (Pollutant identified on front of page)

A.

1. Basis for Allowable Emissions Code: **ESCPSD**		
2. Future Effective Date of Allowable Emissions: **NA**		
3. Requested Allowable Emissions and Units: **0.7 lb/MMBtu**		
4. Equivalent Allowable Emissions:	**305.90** lb/hour	**1339.8** tons/year
5. Method of Compliance (limit to 60 characters): **EPA Method 6**		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): **This limit is more stringent than that contained in the Dade County Code**		

B.

1. Basis for Allowable Emissions Code: **RULE** **Section 24-17(2)(a)(ii), Dade County Code**		
2. Future Effective Date of Allowable Emissions: **NA**		
3. Requested Allowable Emissions and Units:	**Solid Fuels 1.5 lb/MMBtu** **Liquid Fuels 1.1 lb/MMBtu**	
4. Equivalent Allowable Emissions: **Solid**	**655.50** lb/hour	**2871.1** tons/year
Liquid	**480.70** lb/hour	**2105.5** tons/year
5. Method of Compliance (limit to 60 characters): **EPA Method 6**		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):		

Emissions Unit Information Section 2 of 4 [Kiln, Cooler, Raw Mill]

Pollutant Detail Information: Pollutant 5 of 5

1. Pollutant Emitted: **CO**		
2. Total Percent Efficiency of Control: **NA**		%
3. Potential Emissions:	**412.49** lb/hour	**1806.7** tons/year
4. Synthetically Limited? [ ] Yes [X] No		
5. Range of Estimated Fugitive/Other Emissions: **NA** [ ] 1 [ ] 2 [ ] 3	_____ to _____ tons/year	
6. Emission Factor: **3.01 lb/ton clinker** Reference: **Process Knowledge**		
7. Emissions Method Code: [ ] 0 [ ] 1 [ ] 2 [ ] 3 [ ] 4 [X] 5		
8. Calculation of Emissions (limit to 600 characters): **3.011 lb/ton clinker x 137 tph clinker = 412.49 lb/hr** **@ 8760 hrs/yr = 1806.7 tons/yr**		
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):		

ATTACHMENT 2

SCREEN2 MODELING FOR CO, PM10, and VOC

03/04/97
17:48:23

*** SCREEN2 MODEL RUN ***
*** VERSION DATED 95121 ***

RINKER CO, GEP, MILL ON, NET+ = 57.6 TPY

SIMPLE TERRAIN INPUTS:

SOURCE TYPE	=	POINT
EMISSION RATE (G/S)	=	1.66000
STACK HEIGHT (M)	=	65.0000
STK INSIDE DIAM (M)	=	2.4400
STK EXIT VELOCITY (M/S)	=	27.2513
STK GAS EXIT TEMP (K)	=	363.0000
AMBIENT AIR TEMP (K)	=	293.0000
RECEPTOR HEIGHT (M)	=	.0000
URBAN/RURAL OPTION	=	RURAL
BUILDING HEIGHT (M)	=	.0000
MIN HORIZ BLDG DIM (M)	=	.0000
MAX HORIZ BLDG DIM (M)	=	.0000

STACK EXIT VELOCITY WAS CALCULATED FROM
VOLUME FLOW RATE = 270000.00 (ACFM)

BUOY. FLUX = 76.700 M**4/S**3; MOM. FLUX = 892.188 M**4/S**2.

*** FULL METEOROLOGY ***

ANEMOMETER HEIGHT IS: 10.0 METERS

****
*** SCREEN AUTOMATED DISTANCES ***
****

BRODE OPTION 2 WAS EXERCISED. RESULTS ARE ASSUMED TO
BE MORE CONSERVATIVE WITH RESPECT TO ISCST2 RESULTS.

*** TERRAIN HEIGHT OF 0. M ABOVE STACK BASE USED FOR FOLLOWING DISTANCES ***

DIST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	SIGMA Y (M)	SIGMA Z (M)	DWASH
1.	.0000	1	1.0	1.1	529.2	523.98	7.00	6.99	NO
100.	.2109E-09	5	1.0	1.9	10000.0	166.51	22.58	22.02	NO
200.	.4271E-04	5	1.0	1.9	10000.0	166.51	31.25	29.67	NO
300.	.1037E-01	1	3.0	3.4	300.0	217.99	76.14	53.84	NO
400.	.3926	1	3.0	3.4	300.0	217.99	97.70	77.56	NO
500.	1.719	1	3.0	3.4	300.0	217.99	118.56	110.60	NO
600.	3.696	1	2.0	2.3	300.4	294.49	146.04	165.44	NO
700.	5.068	1	2.0	2.3	300.4	294.49	165.82	223.18	NO
800.	5.165	1	2.0	2.3	300.4	294.49	183.51	290.50	NO
900.	4.837	1	1.5	1.7	376.6	370.99	209.32	373.51	NO
1000.	4.540	1	1.5	1.7	376.6	370.99	226.28	462.19	NO
1100.	4.228	1	1.5	1.7	376.6	370.99	243.25	562.14	NO
1200.	3.953	1	1.5	1.7	376.6	370.99	260.19	673.29	NO
1300.	3.736	1	1.0	1.1	529.2	523.98	293.82	801.63	NO
1400.	3.544	1	1.0	1.1	529.2	523.98	309.76	934.39	NO
1500.	3.370	1	1.0	1.1	529.2	523.98	325.72	1078.60	NO
1600.	3.253	2	3.0	3.4	231.1	217.99	238.43	188.19	NO

1700.	3.176	2	3.0	3.4	231.1	217.99	251.21	200.46	NO
1800.	3.118	2	2.5	2.8	261.0	248.59	265.50	214.80	NO
1900.	3.051	2	2.5	2.8	261.0	248.59	278.07	227.16	NO
2000.	2.969	2	2.5	2.8	261.0	248.59	290.57	239.63	NO
2100.	2.904	2	2.0	2.3	306.3	294.49	305.56	255.24	NO
2200.	2.847	2	2.0	2.3	306.3	294.49	317.85	267.75	NO
2300.	2.782	2	2.0	2.3	306.3	294.49	330.08	280.34	NO
2400.	2.711	2	2.0	2.3	306.3	294.49	342.27	293.02	NO
2500.	2.637	2	2.0	2.3	306.3	294.49	354.42	305.79	NO
2600.	2.590	3	3.5	4.2	208.8	188.98	247.76	150.74	NO
2700.	2.573	3	3.5	4.2	208.8	188.98	256.17	155.74	NO
2800.	2.549	3	3.5	4.2	208.8	188.98	264.55	160.74	NO
2900.	2.523	3	3.0	3.6	228.5	209.64	273.74	167.10	NO
3000.	2.506	3	3.0	3.6	228.5	209.64	282.05	172.04	NO
3500.	2.373	3	2.5	3.0	256.5	238.57	324.37	198.59	NO
4000.	2.237	3	2.5	3.0	256.5	238.57	364.85	222.86	NO
4500.	2.118	3	2.0	2.4	298.9	281.96	406.56	249.80	NO
5000.	1.995	3	2.0	2.4	298.9	281.96	445.97	273.58	NO
5500.	1.877	3	1.5	1.8	370.2	354.28	488.06	302.26	NO
6000.	1.796	3	1.5	1.8	370.2	354.28	526.51	325.49	NO
6500.	1.708	3	1.5	1.8	370.2	354.28	564.65	348.68	NO
7000.	1.619	3	1.5	1.8	370.2	354.28	602.51	371.80	NO
7500.	1.534	3	1.5	1.8	370.2	354.28	640.08	394.85	NO
8000.	1.462	3	1.0	1.2	513.9	498.92	683.68	427.94	NO
8500.	1.417	3	1.0	1.2	513.9	498.92	720.42	450.34	NO
9000.	1.369	3	1.0	1.2	513.9	498.92	756.96	472.72	NO
9500.	1.320	3	1.0	1.2	513.9	498.92	793.30	495.07	NO
10000.	1.271	3	1.0	1.2	513.9	498.92	829.45	517.40	NO

MAXIMUM 1-HR CONCENTRATION AT OR BEYOND 1. M:

757.	5.226	1	2.0	2.3	300.4	294.49	176.08	260.85	NO

DWASH= MEANS NO CALC MADE (CONC = 0.0)
DWASH=NO MEANS NO BUILDING DOWNWASH USED
DWASH=HS MEANS HUBER-SNYDER DOWNWASH USED
DWASH=SS MEANS SCHULMAN-SCIRE DOWNWASH USED
DWASH=NA MEANS DOWNWASH NOT APPLICABLE, X<3*LB

****
*** SCREEN DISCRETE DISTANCES ***
****

*** TERRAIN HEIGHT OF 0. M ABOVE STACK BASE USED FOR FOLLOWING DISTANCES ***

DIST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	SIGMA Y (M)	SIGMA Z (M)	DWASH
8200.	1.444	3	1.0	1.2	513.9	498.92	698.40	436.90	NO

DWASH= MEANS NO CALC MADE (CONC = 0.0)
DWASH=NO MEANS NO BUILDING DOWNWASH USED
DWASH=HS MEANS HUBER-SNYDER DOWNWASH USED
DWASH=SS MEANS SCHULMAN-SCIRE DOWNWASH USED
DWASH=NA MEANS DOWNWASH NOT APPLICABLE, X<3*LB

****
*** SUMMARY OF SCREEN MODEL RESULTS ***
****

CALCULATION	MAX CONC	DIST TO	TERRAIN

24-hour averaging time multiplying factor = 0.4; max. concentration = 0.58 ug/m^3

03/04/97
17:44:09

*** SCREEN2 MODEL RUN ***
*** VERSION DATED 95121 ***

RINKER PM10, GEP, MILL ON, NET+ = 9.8 TPY

SIMPLE TERRAIN INPUTS:

SOURCE TYPE	=	POINT
EMISSION RATE (G/S)	=	.280000
STACK HEIGHT (M)	=	65.0000
STK INSIDE DIAM (M)	=	2.4400
STK EXIT VELOCITY (M/S)	=	27.2513
STK GAS EXIT TEMP (K)	=	363.0000
AMBIENT AIR TEMP (K)	=	293.0000
RECEPTOR HEIGHT (M)	=	.0000
URBAN/RURAL OPTION	=	RURAL
BUILDING HEIGHT (M)	=	.0000
MIN HORIZ BLDG DIM (M)	=	.0000
MAX HORIZ BLDG DIM (M)	=	.0000

STACK EXIT VELOCITY WAS CALCULATED FROM
VOLUME FLOW RATE = 270000.00 (ACFM)

BUOY. FLUX = 76.700 M**4/S**3; MOM. FLUX = 892.188 M**4/S**2.

*** FULL METEOROLOGY ***

ANEMOMETER HEIGHT IS: 10.0 METERS

****
*** SCREEN AUTOMATED DISTANCES ***
****

BRODE OPTION 2 WAS EXERCISED. RESULTS ARE ASSUMED TO
BE MORE CONSERVATIVE WITH RESPECT TO ISCST2 RESULTS.

*** TERRAIN HEIGHT OF 0. M ABOVE STACK BASE USED FOR FOLLOWING DISTANCES ***

DIST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	SIGMA Y (M)	SIGMA Z (M)	DWASH
1.	.0000	1	1.0	1.1	529.2	523.98	7.00	6.99	NO
100.	.3558E-10	5	1.0	1.9	10000.0	166.51	22.58	22.02	NO
200.	.7204E-05	5	1.0	1.9	10000.0	166.51	31.25	29.67	NO
300.	.1750E-02	1	3.0	3.4	300.0	217.99	76.14	53.84	NO
400.	.6622E-01	1	3.0	3.4	300.0	217.99	97.70	77.56	NO
500.	.2900	1	3.0	3.4	300.0	217.99	118.56	110.60	NO
600.	.6234	1	2.0	2.3	300.4	294.49	146.04	165.44	NO
700.	.8548	1	2.0	2.3	300.4	294.49	165.82	223.18	NO
800.	.8712	1	2.0	2.3	300.4	294.49	183.51	290.50	NO
900.	.8159	1	1.5	1.7	376.6	370.99	209.32	373.51	NO
1000.	.7658	1	1.5	1.7	376.6	370.99	226.28	462.19	NO
1100.	.7132	1	1.5	1.7	376.6	370.99	243.25	562.14	NO
1200.	.6667	1	1.5	1.7	376.6	370.99	260.19	673.29	NO
1300.	.6301	1	1.0	1.1	529.2	523.98	293.82	801.63	NO
1400.	.5977	1	1.0	1.1	529.2	523.98	309.76	934.39	NO
1500.	.5684	1	1.0	1.1	529.2	523.98	325.72	1078.60	NO
1600.	.5486	2	3.0	3.4	231.1	217.99	238.43	188.19	NO

1700.	.5357	2	3.0	3.4	231.1	217.99	251.21	200.46	NO
1800.	.5260	2	2.5	2.8	261.0	248.59	265.50	214.80	NO
1900.	.5146	2	2.5	2.8	261.0	248.59	278.07	227.16	NO
2000.	.5008	2	2.5	2.8	261.0	248.59	290.57	239.63	NO
2100.	.4898	2	2.0	2.3	306.3	294.49	305.56	255.24	NO
2200.	.4803	2	2.0	2.3	306.3	294.49	317.85	267.75	NO
2300.	.4692	2	2.0	2.3	306.3	294.49	330.08	280.34	NO
2400.	.4572	2	2.0	2.3	306.3	294.49	342.27	293.02	NO
2500.	.4448	2	2.0	2.3	306.3	294.49	354.42	305.79	NO
2600.	.4369	3	3.5	4.2	208.8	188.98	247.76	150.74	NO
2700.	.4340	3	3.5	4.2	208.8	188.98	256.17	155.74	NO
2800.	.4299	3	3.5	4.2	208.8	188.98	264.55	160.74	NO
2900.	.4255	3	3.0	3.6	228.5	209.64	273.74	167.10	NO
3000.	.4226	3	3.0	3.6	228.5	209.64	282.05	172.04	NO
3500.	.4003	3	2.5	3.0	256.5	238.57	324.37	198.59	NO
4000.	.3774	3	2.5	3.0	256.5	238.57	364.85	222.86	NO
4500.	.3573	3	2.0	2.4	298.9	281.96	406.56	249.80	NO
5000.	.3365	3	2.0	2.4	298.9	281.96	445.97	273.58	NO
5500.	.3165	3	1.5	1.8	370.2	354.28	488.06	302.26	NO
6000.	.3030	3	1.5	1.8	370.2	354.28	526.51	325.49	NO
6500.	.2881	3	1.5	1.8	370.2	354.28	564.65	348.68	NO
7000.	.2731	3	1.5	1.8	370.2	354.28	602.51	371.80	NO
7500.	.2587	3	1.5	1.8	370.2	354.28	640.08	394.85	NO
8000.	.2465	3	1.0	1.2	513.9	498.92	683.68	427.94	NO
8500.	.2390	3	1.0	1.2	513.9	498.92	720.42	450.34	NO
9000.	.2309	3	1.0	1.2	513.9	498.92	756.96	472.72	NO
9500.	.2226	3	1.0	1.2	513.9	498.92	793.30	495.07	NO
10000.	.2144	3	1.0	1.2	513.9	498.92	829.45	517.40	NO

MAXIMUM 1-HR CONCENTRATION AT OR BEYOND 1. M:

757.	.8816	1	2.0	2.3	300.4	294.49	176.08	260.85	NO

DWASH= MEANS NO CALC MADE (CONC = 0.0)
DWASH=NO MEANS NO BUILDING DOWNWASH USED
DWASH=HS MEANS HUBER-SNYDER DOWNWASH USED
DWASH=SS MEANS SCHULMAN-SCIRE DOWNWASH USED
DWASH=NA MEANS DOWNWASH NOT APPLICABLE, X<3*LB

****
*** SCREEN DISCRETE DISTANCES ***
****

*** TERRAIN HEIGHT OF 0. M ABOVE STACK BASE USED FOR FOLLOWING DISTANCES ***

DIST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	SIGMA Y (M)	SIGMA Z (M)	DWASH
8200.	.2436	3	1.0	1.2	513.9	498.92	698.40	436.90	NO

DWASH= MEANS NO CALC MADE (CONC = 0.0)
DWASH=NO MEANS NO BUILDING DOWNWASH USED
DWASH=HS MEANS HUBER-SNYDER DOWNWASH USED
DWASH=SS MEANS SCHULMAN-SCIRE DOWNWASH USED
DWASH=NA MEANS DOWNWASH NOT APPLICABLE, X<3*LB

****
*** SUMMARY OF SCREEN MODEL RESULTS ***
****

CALCULATION MAX CONC DIST TO TERRAIN

24-hour averaging time multiplying factor = 0.4; max concentration = 0.10 ug/m^3

03/07/97
11:38:39

*** SCREEN2 MODEL RUN ***
*** VERSION DATED 95121 ***

RINKER VOC, GEP, MILL ON, NET+ = 32.9 TPY

SIMPLE TERRAIN INPUTS:

SOURCE TYPE	=	POINT
EMISSION RATE (G/S)	=	.950000
STACK HEIGHT (M)	=	65.0000
STK INSIDE DIAM (M)	=	2.4400
STK EXIT VELOCITY (M/S)	=	27.2513
STK GAS EXIT TEMP (K)	=	363.0000
AMBIENT AIR TEMP (K)	=	293.0000
RECEPTOR HEIGHT (M)	=	.0000
URBAN/RURAL OPTION	=	RURAL
BUILDING HEIGHT (M)	=	.0000
MIN HORIZ BLDG DIM (M)	=	.0000
MAX HORIZ BLDG DIM (M)	=	.0000

STACK EXIT VELOCITY WAS CALCULATED FROM
VOLUME FLOW RATE = 270000.00 (ACFM)

BUOY. FLUX = 76.700 M**4/S**3; MOM. FLUX = 892.188 M**4/S**2.

*** FULL METEOROLOGY ***

ANEMOMETER HEIGHT IS: 10.0 METERS

****
*** SCREEN AUTOMATED DISTANCES ***
****

BRODE OPTION 2 WAS EXERCISED. RESULTS ARE ASSUMED TO
BE MORE CONSERVATIVE WITH RESPECT TO ISCST2 RESULTS.

*** TERRAIN HEIGHT OF 0. M ABOVE STACK BASE USED FOR FOLLOWING DISTANCES ***

DIST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	SIGMA Y (M)	SIGMA Z (M)	DWASH
1.	.0000	1	1.0	1.1	529.2	523.98	7.00	6.99	NO
100.	.1207E-09	5	1.0	1.9	10000.0	166.51	22.58	22.02	NO
200.	.2444E-04	5	1.0	1.9	10000.0	166.51	31.25	29.67	NO
300.	.5936E-02	1	3.0	3.4	300.0	217.99	76.14	53.84	NO
400.	.2247	1	3.0	3.4	300.0	217.99	97.70	77.56	NO
500.	.9838	1	3.0	3.4	300.0	217.99	118.56	110.60	NO
600.	2.115	1	2.0	2.3	300.4	294.49	146.04	165.44	NO
700.	2.900	1	2.0	2.3	300.4	294.49	165.82	223.18	NO
800.	2.956	1	2.0	2.3	300.4	294.49	183.51	290.50	NO
900.	2.768	1	1.5	1.7	376.6	370.99	209.32	373.51	NO
1000.	2.598	1	1.5	1.7	376.6	370.99	226.28	462.19	NO
1100.	2.420	1	1.5	1.7	376.6	370.99	243.25	562.14	NO
1200.	2.262	1	1.5	1.7	376.6	370.99	260.19	673.29	NO
1300.	2.138	1	1.0	1.1	529.2	523.98	293.82	801.63	NO
1400.	2.028	1	1.0	1.1	529.2	523.98	309.76	934.39	NO
1500.	1.929	1	1.0	1.1	529.2	523.98	325.72	1078.60	NO
1600.	1.861	2	3.0	3.4	231.1	217.99	238.43	188.19	NO

1700.	1.817	2	3.0	3.4	231.1	217.99	251.21	200.46	NO
1800.	1.785	2	2.5	2.8	261.0	248.59	265.50	214.80	NO
1900.	1.746	2	2.5	2.8	261.0	248.59	278.07	227.16	NO
2000.	1.699	2	2.5	2.8	261.0	248.59	290.57	239.63	NO
2100.	1.662	2	2.0	2.3	306.3	294.49	305.56	255.24	NO
2200.	1.630	2	2.0	2.3	306.3	294.49	317.85	267.75	NO
2300.	1.592	2	2.0	2.3	306.3	294.49	330.08	280.34	NO
2400.	1.551	2	2.0	2.3	306.3	294.49	342.27	293.02	NO
2500.	1.509	2	2.0	2.3	306.3	294.49	354.42	305.79	NO
2600.	1.482	3	3.5	4.2	208.8	188.98	247.76	150.74	NO
2700.	1.473	3	3.5	4.2	208.8	188.98	256.17	155.74	NO
2800.	1.459	3	3.5	4.2	208.8	188.98	264.55	160.74	NO
2900.	1.444	3	3.0	3.6	228.5	209.64	273.74	167.10	NO
3000.	1.434	3	3.0	3.6	228.5	209.64	282.05	172.04	NO
3500.	1.358	3	2.5	3.0	256.5	238.57	324.37	198.59	NO
4000.	1.280	3	2.5	3.0	256.5	238.57	364.85	222.86	NO
4500.	1.212	3	2.0	2.4	298.9	281.96	406.56	249.80	NO
5000.	1.142	3	2.0	2.4	298.9	281.96	445.97	273.58	NO
5500.	1.074	3	1.5	1.8	370.2	354.28	488.06	302.26	NO
6000.	1.028	3	1.5	1.8	370.2	354.28	526.51	325.49	NO
6500.	.9774	3	1.5	1.8	370.2	354.28	564.65	348.68	NO
7000.	.9265	3	1.5	1.8	370.2	354.28	602.51	371.80	NO
7500.	.8778	3	1.5	1.8	370.2	354.28	640.08	394.85	NO
8000.	.8364	3	1.0	1.2	513.9	498.92	683.68	427.94	NO
8500.	.8107	3	1.0	1.2	513.9	498.92	720.42	450.34	NO
9000.	.7833	3	1.0	1.2	513.9	498.92	756.96	472.72	NO
9500.	.7552	3	1.0	1.2	513.9	498.92	793.30	495.07	NO
10000.	.7275	3	1.0	1.2	513.9	498.92	829.45	517.40	NO

MAXIMUM 1-HR CONCENTRATION AT OR BEYOND 1. M:

757.	2.991	1	2.0	2.3	300.4	294.49	176.08	260.85	NO

DWASH= MEANS NO CALC MADE (CONC = 0.0)
DWASH=NO MEANS NO BUILDING DOWNWASH USED
DWASH=HS MEANS HUBER-SNYDER DOWNWASH USED
DWASH=SS MEANS SCHULMAN-SCIRE DOWNWASH USED
DWASH=NA MEANS DOWNWASH NOT APPLICABLE, X<3*LB

****
*** SCREEN DISCRETE DISTANCES ***
****

*** TERRAIN HEIGHT OF 0. M ABOVE STACK BASE USED FOR FOLLOWING DISTANCES ***

DIST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	SIGMA Y (M)	SIGMA Z (M)	DWASH
8200.	.8265	3	1.0	1.2	513.9	498.92	698.40	436.90	NO

DWASH= MEANS NO CALC MADE (CONC = 0.0)
DWASH=NO MEANS NO BUILDING DOWNWASH USED
DWASH=HS MEANS HUBER-SNYDER DOWNWASH USED
DWASH=SS MEANS SCHULMAN-SCIRE DOWNWASH USED
DWASH=NA MEANS DOWNWASH NOT APPLICABLE, X<3*LB

****
*** SUMMARY OF SCREEN MODEL RESULTS ***
****

CALCULATION	MAX CONC	DIST TO	TERRAIN

24-hour averaging time multiplying factor = 0.4; max concentration = 0.33 ug/m^3

E. EMISSION POINT (STACK/VENT) INFORMATION
(Regulated Emissions Units Only)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: **Kiln, Cooler and Raw Mill Baghouse Stack**	
2. Emission Point Type Code: [X] 1 [ ] 2 [ ] 3 [ ] 4	
3. Descriptions of Emissions Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): **NA**	
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: **NA**	
5. Discharge Type Code: [ ] D [ ] F [ ] H [ ] P [ ] R [X] V [ ] W	
6. Stack Height:	**330** feet
7. Exit Diameter:	**8** feet

ATTACHMENT 3

SUMMARY OF EMISSION RATES: BASELINE and COAL/TDF, JANUARY 1993

SUMMARY OF PARTICULATE MATTER, SULFUR DIOXIDE, TOTAL HYDROCARBONS, CARBON MONOXIDE, NITROGEN OXIDES, METALS AND BENZENE EMISSION RATES

BASELINE AND COAL/TDF FIRING CONDITIONS

RINKER MATERIALS CORPORATION
MIAMI, FLORIDA

JANUARY 27-29, 1993

KOOGLER & ASSOCIATES
ENVIRONMENTAL SERVICES
4014 N.W. 13TH STREET
GAINESVILLE, FL 32609
(904) 377-5822

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1.0 INTRODUCTION

Rinker Materials Corporation (Rinker) operates two wet process Portland cement kilns in Miami, Dade County, Florida. The cement plant was originally constructed in the mid-1950s. Presently, both kilns are permitted under permit A013-172954 at a feed rate of 55 tons per hour each. Each kiln is normally fired with coal at a heat input rate of approximately 200 MMBTU per hour.

Rinker applied to FDER requesting approval to burn tire derived fuel (TDF) as a supplemental heat source in Kiln No. 1 of the cement plant. On July 6, 1992, FDER issued an amendment to the referenced permit authorizing performance tests to evaluate plant performance while using TDF to supply up to 40 percent of the heat input to the kiln. During the period January 27-29, 1993, tests were conducted to measure air pollutant emissions from the stack common to both Kiln 1 and Kiln 2 while the plant was operating with whole TDF supplying up to 40 percent of the heat input to Kiln No. 1 and under baseline conditions. During the test period, Kiln No. 2 operated under normal conditions with coal providing 100 percent of the heat input.

During the two test periods, the operations of the two kilns were consistent. Kiln oxygen levels, kiln temperatures and gas flow rates were within ranges normally encountered. Overall the combined emission rate of particulate matter, total hydrocarbons, nitrogen oxides, sulfur dioxide and carbon monoxide decreased from 1959 pounds per hour under baseline

conditions to 1464 pounds per hour under coal/TDF conditions. The major reduction was in nitrogen oxides emissions.

The coal/TDF tests were conducted during the period 1041-1730 on January 27, 1993. During the coal/TDF test period:

a. Coal was fed to Kiln No. 1 at an average rate of 5.56 tons per hour; providing 70.1 percent of the heat input or approximately 141.4 MMBTU per hour. TDF provided 29.9 percent of the heat input to Kiln No. 1; or approximately 60.3 MMBTU per hour. The total heat input to Kiln No. 1 averaged 201.7 MMBTU per hour. The Kiln No. 1 feed rate averaged 55.6 tons per hour and the clinker production rate averaged 33.9 tons per hour (Table 1).

b. The Kiln No. 2 feed rate averaged 55.4 tons per hour and the clinker production rate averaged 33.9 tons per hour. Coal provided 100 percent of the heat input (193.1 MMBTU/hr) at an average feed rate of 7.59 tons per hour (Table 1).

c. The particulate matter emission rate from the stack common to both kilns averaged 39.32 pounds per hour (Table 3). The allowable emission rate from the two kilns combined is 66 pounds per hour.

d. The total hydrocarbon emission rate averaged 14.1 pounds per hour as propane measured by EPA Method 25A. The emission rate of benzene averaged 0.0698 pounds per hour (Table 4).

e. The nitrogen oxides emission rate averaged 926 pounds per hour (Table 5) as measured by EPA Method 7E.

f. The carbon monoxide emission rate averaged 235 pounds per hour (Table 6) as measured by EPA Method 10.

g. The sulfur dioxide emission rate averaged 326 pounds per hour (Table 7A) as measured by EPA Method 6 and 249 pounds per hour as measured by EPA Method 6C (Table 7B).

h. The emission rates of metals ranged from 0.33 pounds per hour for zinc to less than detectable for antimony, arsenic, beryllium, cadmium, selenium and silver (Table 8).

i. All the stack gas characteristics such as flow, temperature, moisture, oxygen and CO_2 are reported in Table 9.

The baseline tests were conducted during the period 1352-1904 on January 29, 1993, after Kiln No. 1 had approximately 44 hours to equilibrate on 100 percent coal. During the baseline test period:

a. Coal was feed to Kiln No. 1 at an average rate of 6.55 tons per hour and provided 100 percent of the heat input; or approximately 177.9 MMBTU per hour. The kiln feed rate averaged 58.8 tons per hour and the clinker production rate averaged 35.8 tons per hour (Table 2).

b. Kiln No. 2 operated at an average feed rate of 58.4 tons per hour and a clinker production rate of 35.6 tons per hour. Coal provided 100 percent of the heat input; or 174.5 MMBTU/hr (Table 2). The coal feed rate for this kiln averaged 6.43 tons per hour.

c. The particulate matter emission rate from the stack common to both kilns averaged 19.37 pounds per hour (Table 10).

d. The total hydrocarbon emission rate averaged 11.5 pounds per hour as propane measured by EPA Method 25A. The emission rate of benzene averaged 0.0196 pounds per hour (Table 4).

e. The nitrogen oxides emission rate averaged 1182 pounds per hour (Table 5) as measured by EPA Method 7E.

f. The carbon monoxide emission rate averaged 426 pounds per hour (Table 6) as measured by EPA Method 10.

g. The sulfur dioxide emission rate averaged 380 pounds per hour (Table 7A) as measured by EPA Method 6 and 320 pounds per hour as measured by EPA Method 6C (Table 7B).

h. The emission rates of metals ranged from 0.74 pounds per hour for zinc to less than detectable for antimony, arsenic, beryllium, cadmium, selenium and silver (Table 11).

i. All the stack gas characteristics such as flow, temperature, moisture, oxygen and CO_2 are reported in Table 12.

2.0 PROCESS DESCRIPTION

The Rinker Materials Corporation plant consists of two wet process Portland cement kilns. Each of the two kilns has a permitted feed rate of 55 tons per hour (dry). There is no permit limit on either the clinker production or the heat input. Both kilns are normally fired with coal at an average rate of 6.5-7.0 tons per hour, each resulting in an average heat input rate of about 200 MMBTU per hour each. During the TDF test period, the coal feed rate to Kiln No. 1 averaged 5.57 tons per hour (at 12882 BTU per pound) for an average heat input rate of 141.4 MMBTU per hour. The TDF feed rate to the kiln averaged 1.84 tons per hour (at 16379 BTU per pound) for an average heat input rate of 60.3 MMBTU per hour. The total heat input to Kiln No. 1 averaged 201.7 MMBTU per hour, with coal providing 70.1 percent of the thermal energy and TDF providing 29.9 percent of the energy. The Kiln No. 2 coal feed rate averaged 7.59 tons per hour (at 12571 BTU/pound) for an average heat input of 193.1 MMBTU per hour.

During the TDF test period, the Kiln No. 1 feed rate averaged 55.6 tons per hour and the clinker production rate averaged approximately 33.9 tons per hour. The Kiln No. 2 feed rate averaged 55.4 tons per hour and the clinker production rate averaged 33.9 tons per hour.

During the baseline test period, the Kiln No. 1 feed rate averaged 58.8 tons per hour and the clinker production rate averaged approximately 35.8 tons per hour. The Kiln No. 1 coal feed rate averaged 6.55 tons per hour

(177.9 MMBTU per hour). The Kiln No. 2 feed rate averaged 58.4 tons per hour and the clinker production rate averaged 35.6 tons per hour. The Kiln No. 2 coal feed rate averaged 6.43 tons per hour for an average heat input of 174.5 MMBTU per hour.

3.0 LOCATION OF SAMPLING PORTS

The location of the sampling points are shown in Figure 1. Stack gas flow rate measurements and sample collection for particulate matter, metals, sulfur dioxide (Method 6), and speciated volatile organic compounds (benzene) emission measurements were made through four sampling ports located at about the 85-foot level of the stack. Samples for determining the nitrogen oxides, carbon monoxide, sulfur dioxide (Method 6C) and total hydrocarbon concentrations of the stack gas were made at a single point near the center of the stack (Figure 1).

The four sampling ports at the 85 foot level of the stack are located at 90 degrees to one another in the 15-foot diameter stack; 65 feet above the point where the stack gases are introduced to the stack and approximately 30 feet below the top of the stack. A total of 24 sampling points were used for the velocity and sampling traverses. The sampling points were located in accordance with criteria established by EPA test Method 1 (40CFR60, Appendix A).

Measurements of the nitrogen oxides, carbon monoxide, total hydrocarbons, benzene and sulfur dioxide (Method 6C) concentrations in the stack gas were also made at the 85 foot level but at a single point near the center of the stack.

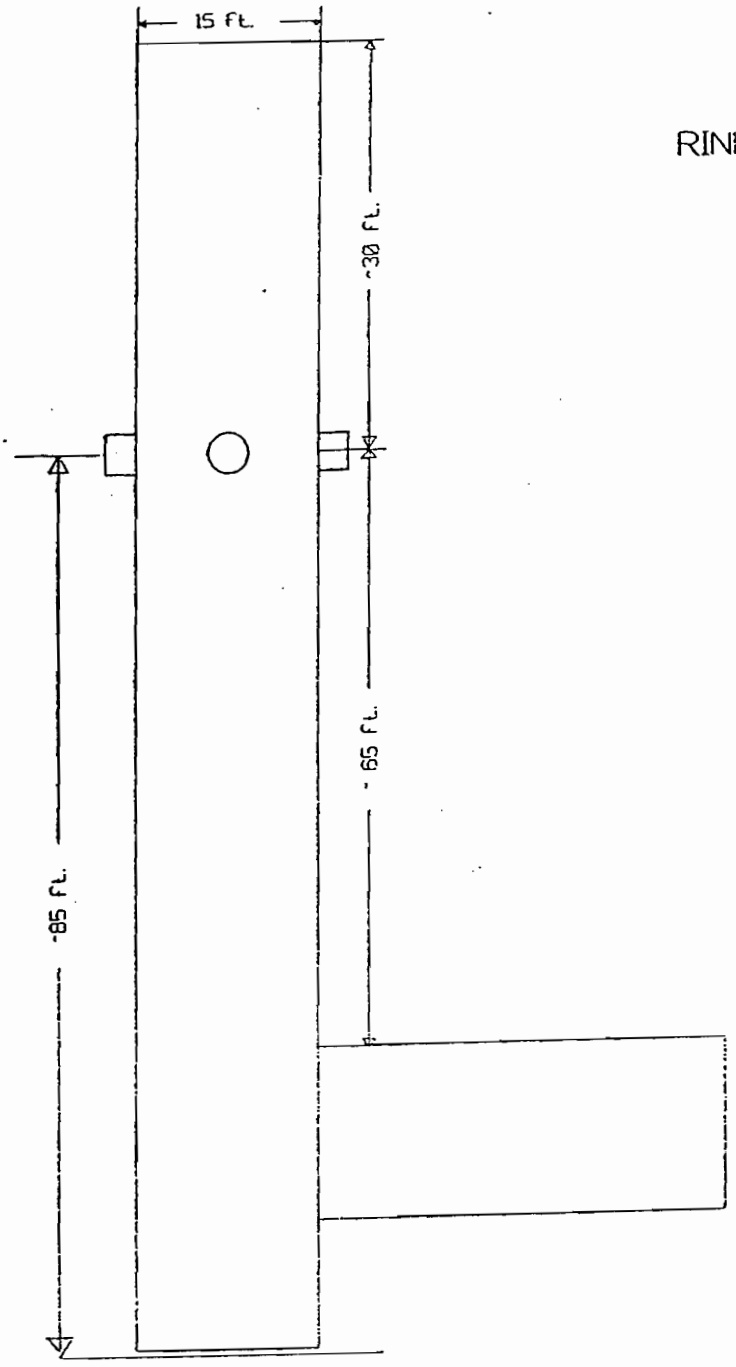


FIGURE 1

CEMENT PLANT

RINKER MATERIALS CORPORATION

MIAMI. FLORIDA

Distance from Stock Wall to Sampling Points

Point	Distance (in)
1	3.8
2	12.1
3	21.2
4	31.9
5	45.0
6	63.9

KOOGLER & ASSOCIATES

4.0 TEST METHODS

The nitrogen oxides concentrations were continuously measured in accordance with EPA Test Method 7E, carbon monoxide concentrations were continuously measured in accordance with EPA Test Method 10, sulfur dioxide was continuously measured in accordance with EPA Method 6C, and total hydrocarbon concentrations were continuously measured in accordance with EPA Test Method 25A. All test methods are described in 40CFR60, Appendix A. The sample of stack gas for these continuous analyzers was collected from a single point in the middle of the stack and transported to a heated manifold through a heated teflon sample line. The sample gas stream was then split with the fraction for NOx and SO_2 analyses passing through a cold trap to remove water vapor before the gas stream was introduced to the NOx and SO_2 analyzers. The gas sample for carbon monoxide was passed through as ascarite column to remove moisture and CO_2 and the sample for total hydrocarbons was transferred directly to the analyzer through another heated teflon line.

Moisture, stack gas flow rate, oxygen and CO_2 were measured in accordance with EPA Methods 1, 2, 3 and 4, 40CFR60, Appendix A. Benzene emission rates were measured at the 85 foot level of the stack with EPA Method M-0300 using the volatile organic sampling train (VOST). Sulfur dioxide samples were also collected in the EPA Method 6 sampling train (40CFR60, Appendix A). Particulate matter was determined from the probe and filter of the Multi-Metals sampling train as described in EPA SW846-0012.

5.0 SUMMARY OF RESULTS

The results of the TDF tests conducted during the period January 27, 1993, are summarized in Tables 1, 3 and 13-14. During the TDF tests:

a. The particulate matter emission rate from the stack common to both kilns averaged 39.32 pounds per hour (Table 3). The allowable emission rate from the two kilns combined is 66 pounds per hour.

b. Kiln No. 1 was fired with low-sulfur coal at a rate of 5.56 tons per hour (141.4 MMBTU/hr) and whole TDF at a rate of 1.84 tons per hour (60.3 MMBTU/hr). The total heat input rate to Kiln No. 1 averaged 201.7 MMBTU per hour (Table 1). Kiln No. 2 was fired with low sulfur coal only at a rate of 7.59 tons per hour providing 100 percent of the total heat input to the kiln of 193.1 MMBTU per hour.

   The feed rate to Kiln No. 1 averaged 55.6 tons per hour and the clinker production rate averaged 33.9 tons per hour. The feed rate to Kiln No. 2 averaged 55.4 tons per hour and the clinker production rate averaged 33.9 tons per hour.

c. The nitrogen oxides emission rate averaged 926 pounds per hour (Table 5) as measured by EPA Method 7E.

d. The carbon monoxide emission rate averaged 235 pounds per hour (Table 6) as measured by EPA Method 10.

e. The total hydrocarbon emission rate 14.1 pounds per hour as propane. The emission rate of benzene averaged 0.0698 pound per hour (Table 4).

f. The sulfur dioxide emission rate averaged 326 pounds per hour as measured by EPA Method 6 and 249 pounds per hour as measured by EPA Method 6C. A summary of these data is presented in Tables 7A and 7B, respectively.

g. Stack gas flow, temperature, moisture, oxygen and CO_2 contents are summarized in Table 9. The gas flow rate averaged 130,376 dscfm at 395°F and 32.1 percent moisture. The oxygen concentration averaged 7.4 percent and the carbon dioxide concentration averaged 17.21 percent.

h. The analyses of coal and the TDF burned in each kiln are summarized in Table 14. Analyses of feed, clinker and precipitator dust are summarized in Table 13.

i. The emission rates of metals ranged from 0.33 pounds per hour for zinc to less than detectable for antimony, arsenic, beryllium, cadmium, selenium and silver (Table 8).

The results of the baseline tests conducted during the period January 29, 1993, are summarized in Tables 2, 4-7 and 10-14. During the baseline tests:

a. The particulate matter emission rate from the stack common to both kilns averaged 19.37 pounds per hour (Table 10).

b. Kiln No. 1 was fired with low-sulfur coal at a rate of 6.55 tons per hour (177.9 MMBTU/hr). Kiln No. 2 was fired with low-sulfur coal at a rate of 6.43 tons per hour (174.5 MMBTU/hr) (Table 2).

The feed rate to the Kiln No. 1 averaged 58.8 tons per hour and the clinker production rate averaged 35.8 tons per hour. The feed rate to Kiln No. 2 averaged 58.4 tons per hour and the clinker production rate averaged 35.6 tons per hour.

c. The nitrogen oxides emission rate averaged 1182 pounds per hour (Table 5) as measured by EPA Method 7E.

d. The carbon monoxide emission rate averaged 426 pounds per hour (Table 6) as measured by EPA Method 10.

e. The total hydrocarbon emission rate averaged 11.5 pounds per hour as propane measured by EPA Method 25A. Emission rates of benzene averaged 0.0196 pound per hour (Table 4).

f. The sulfur dioxide emission rate averaged 380 pounds per hour as measured by EPA Method 6 and 320 pounds per hour as measured by EPA Method 6C. A summary of these data is presented in Table 7A and 7B, respectively.

g. Stack gas flow, temperature, moisture, oxygen and CO_2 contents are summarized in Table 12. The gas flow rate averaged 120,109 dscfm at 274°F and 31.9 percent moisture. The oxygen concentration averaged 6.38 percent and the carbon dioxide concentration averaged 20.31 percent.

h. The analyses of coal burned in each kiln are summarized in Table 14. Analyses of feed, clinker and precipitation dust are summarized in Table 15.

i. The emission rates of metals ranged from 0.74 pounds per hour for zinc to less than detectable for antimony, arsenic, beryllium, cadmium, selenium and silver (Table 11).

TABLE 1

PLANT OPERATING PARAMETERS

TDF TEST CONDITIONS

RINKER MATERIALS CORPORATION
MIAMI, FLORIDA

JANUARY 27, 1993

	Run 1	Run 2	Run 3
Kiln No. 1			
Process weight, TPH	56.2	55.2	55.4
Coal rate, TPH	5.60	5.52	5.55
Coal heat input, MMBTU/hr	144.28	143.25	142.99
Tire feed rate, TPH	1.85	1.83	1.84
Tire heat input, MMBTU/hr	60.60	60.01	60.34
Total heat Input, MMBTU/hr	204.88	203.26	203.33
Clinker rate, TPH	34.3	33.7	33.8
Feed end temperature	415	425	425
Feed end oxygen	2.4	2.5	3.1
Kiln No. 2			
Process weight, TPH	55.5	55.7	55.1
Coal rate, TPH	7.59	7.45	7.72
Coal heat input, MMBTU/hr	190.83	187.31	194.10
Clinker rate, TPH	34.0	34.1	33.7
Feed end temperature	390	396	388
Feed end oxygen	2.3	2.1	1.8

TABLE 2

PLANT OPERATING PARAMETERS

BASELINE TEST CONDITIONS

RINKER MATERIALS CORPORATION
MIAMI, FLORIDA

JANUARY 29, 1993

	Run 1	Run 2	Run 3
Kiln No. 1			
Process weight, TPH	59.2	58.2	58.9
Coal rate, TPH	6.55	6.57	6.53
Coal heat input, MMBTU/hr	177.41	177.96	176.87
Clinker rate, TPH	36.1	35.5	35.9
Feed end temperature	270	272	280
Feed end oxygen	0.4	0.3	0.4
Kiln No. 2			
Process weight, TPH	59.1	58.2	57.9
Coal rate, TPH	6.47	6.41	6.40
Coal heat input, MMBTU/hr	176.20	174.57	174.30
Clinker rate, TPH	36.0	35.5	35.3
Feed end temperature	385	373	375
Feed end oxygen	2.5	2.6	2.6

Table 3

SUMMARY OF SOURCE EMISSION TEST DATA

Rinker Material Corporation
Cement Kiln - TDF
January 27, 1993

Run No.	Process Weight Rate (Tons/Hr)	Stack Flow Rate (SCFMD)	Stack Gas Temp. (Deg F)	Stack Gas Moisture (%)	Particulate Matter		
					Conc. (gr/dscf)	Conc. at 7% O2 (gr/dscf)	Emission Rate (Lbs/Hr)
1	(1)	124926	340.2	31.7	0.0378	0.0408	40.50
2	(1)	134250	332.1	31.7	0.0339	0.0351	38.96
3	(1)	131954	314.8	32.1	0.0341	0.0367	38.51
Avg.	(1)	130377	329.0	31.8	0.0352	0.0375	39.32

(1) See Table 1

TABLE 4

SUMMARY OF TOTAL HYDROCARBON EMISSION MEASUREMENTS
BASELINE AND TDF TEST CONDITIONS

RINKER MATERIALS CORPORATION
MIAMI, FLORIDA

JANUARY 27-29, 1993

METHOD 25A

	Total Hydrocarbon Emissions (1)			
	Baseline		TDF	
Run	PPM	lbs/hr	PPM	lbs/hr
1	13.9	11.3	11.9	10.2
2	14.5	12.2	15.6	14.4
3	13.5	11.0	19.7	17.8
Avg		11.5		14.1

(1) as propane

TABLE 5

SUMMARY OF NITROGEN OXIDES EMISSION MEASUREMENTS
BASELINE AND TDF TEST CONDITIONS

RINKER MATERIALS CORPORATION
MIAMI, FLORIDA

JANUARY 27-29, 1993

METHOD 7E

	Nitrogen Oxides Emissions (1)			
	Baseline		TDF	
Run	PPM	lbs/hr	PPM	lbs/hr
1	1042	883	1153	1033
2	1401	1233	949	913
3	1672	1431	880	832
Avg		1182		926

(1) as NO_2

TABLE 6

SUMMARY OF CARBON MONOXIDE EMISSION MEASUREMENTS
BASELINE AND TDF TEST CONDITIONS

RINKER MATERIALS CORPORATION
MIAMI, FLORIDA

JANUARY 27-29, 1993

METHOD 10

Run	Carbon Monoxide Emissions			
	Baseline		TDF	
	PPM	lbs/hr	PPM	lbs/hr
1	889	464	364	198
2	811	435	421	247
3	727	379	450	259
Avg		426		235

TABLE 7A

SUMMARY OF SULFUR DIOXIDE EMISSION MEASUREMENTS
BASELINE AND TDF TEST CONDITIONS

RINKER MATERIALS CORPORATION
MIAMI, FLORIDA

JANUARY 27-29, 1993

METHOD 6

Run	Sulfur Dioxide Emissions			
	Baseline		TDF	
	PPM at Stack Conditions	lbs/hr	PPM at Stack Conditions	lbs/hr
1	324.36	378.21	215.32	248.64
2	301.86	395.74	212.25	276.66
3	286.55	365.18	345.98	452.43
Avg	304.26	379.71	257.85	325.91

TABLE 7B

SUMMARY OF SULFUR DIOXIDE EMISSION MEASUREMENTS
BASELINE AND TDF TEST CONDITIONS

RINKER MATERIALS CORPORATION
MIAMI, FLORIDA

JANUARY 27-29, 1993

METHOD 6C

	Sulfur Dioxide Emissions			
	Baseline		TDF	
Run	PPM	lbs/hr	PPM	lbs/hr
1	243	286	148.7	186
2	279	342	137.1	183
3	280	333	287.3	378
Avg		320		249

TABLE 8

SUMMARY OF METALS EMISSION MEASUREMENTS
TDF CONDITIONS

RINKER MATERIALS CORPORATION
MIAMI, FLORIDA

JANUARY 27, 1993

Metal	Metals Emissions						
	Run 1		Run 2		Run 3		Average
	Sample Mass (μg)	Emission Rate (lbs/hr)	Sample Mass (μg)	Emission Rate (lbs/hr)	Sample Mass (μg)	Emission Rate (lbs/hr)	Emission Rate (lbs/hr)
Antimony	<13	<0.0043	<13	<0.0046	<13	<0.0041	<0.00433
Arsenic	<3	<0.0010	<3	<0.0011	<3	<0.0009	<0.00100
Beryllium	<3	<0.0010	<3	<0.0011	<3	<0.0009	<0.00100
Cadmium	<9	<0.0030	<9	<0.0032	<9	<0.0028	<0.00300
Chromium	25	0.0084	30	0.0106	17	0.0053	0.00809
Copper	24	0.0080	21	0.0074	12	0.0038	0.00639
Lead	91	0.0304	76	0.0268	96	0.0301	0.02911
Mercury	34.1	0.0114	38.6	0.0136	23.2	0.0073	0.01076
Nickel	14	0.0047	12	0.0042	6	0.0019	0.00359
Selenium	<200	<0.0668	<200	<0.0706	<200	<0.0627	<0.06672
Silver	<4	<0.0013	<4	<0.0014	<4	<0.0013	<0.00133
Zinc	160	0.0535	1380	0.4871	1430	0.4485	0.32969

TABLE 9

SUMMARY OF STACK GAS CHARACTERISTICS
TDF CONDITIONS

RINKER MATERIALS CORPORATION
MIAMI, FLORIDA

JANUARY 27, 1993

Run No.	Stack Gas Flow Rate (dscfm)	Stack Gas Temp. (^{o}F)	Stack Gas Moisture (%)	Meter Volume (dscf)	Stack Gas O_2 Conc (%)	Stack Gas CO_2 Conc (%)
1	124,926	340.2	31.7	49.440	8.0	15.6
2	134,250	332.1	31.7	50.310	7.5	17.5
3	131,954	314.8	32.1	55.649	6.8	18.5
Avg	130,376	329.0	32.1	51.800	7.4	17.2

Table 10

SUMMARY OF SOURCE EMISSION TEST DATA

Rinker Material Corporation
Cement Kiln - BASELINE
January 29, 1993

Run No.	Process Weight Rate (Tons/Hr)	Stack Flow Rate (SCFMD)	Stack Gas Temp. (Deg F)	Stack Gas Moisture (%)	Particulate Matter		
					Conc. (gr/dscf)	Conc. at 7% O2 (gr/dscf)	Emission Rate (Lbs/Hr)
1	(1)	118174	271.9	32.1	0.0193	0.0195	19.54
2	(1)	122790	272.6	31.4	0.0184	0.0172	19.41
3	(1)	119363	278.5	32.2	0.0187	0.0175	19.16
Avg.	(1)	120109	274.3	31.9	0.0188	0.0181	19.37

(1) See Table 2

TABLE 11

SUMMARY OF METALS EMISSION MEASUREMENTS
BASELINE CONDITIONS

RINKER MATERIALS CORPORATION
MIAMI, FLORIDA

JANUARY 29, 1993

Metal	Metals Emissions						
	Run 1		Run 2		Run 3		Average
	Sample Mass (μg)	Emission Rate (lbs/hr)	Sample Mass (μg)	Emission Rate (lbs/hr)	Sample Mass (μg)	Emission Rate (lbs/hr)	Emission Rate (lbs/hr)
Antimony	<13	<0.0056	<13	<0.0053	<13	<0.0052	<0.00540
Arsenic	<3	<0.0013	<3	<0.0012	<3	<0.0012	<0.00124
Beryllium	<3	<0.0013	<3	<0.0012	<3	<0.0012	<0.00124
Cadmium	<9	<0.0039	<9	<0.0037	<9	<0.0036	<0.00374
Chromium	8	0.0035	33	0.0136	40	0.0161	0.01105
Copper	2	0.0009	2	0.0008	7	0.0028	0.00150
Lead	36	0.0156	43	0.0177	45	0.0181	0.01714
Mercury	39.6	0.0172	13.5	0.0056	11.6	0.0047	0.00914
Nickel	2	0.0009	7	0.0029	10	0.0040	0.00259
Selenium	<200	<0.0869	<200	<0.0823	<200	<0.0805	<0.08322
Silver	<4	<0.0017	<4	<0.0016	<4	<0.0016	<0.00166
Zinc	2050	0.8902	1460	0.6006	1780	0.7168	0.73587

TABLE 12

SUMMARY OF STACK GAS CHARACTERISTICS
BASELINE CONDITIONS

RINKER MATERIALS CORPORATION
MIAMI, FLORIDA

JANUARY 29, 1993

Run No.	Stack Gas Flow Rate (dscfm)	Stack Gas Temp. (^{o}F)	Stack Gas Moisture (%)	Meter Volume (dscf)	Stack Gas O_2 Conc (%)	Stack Gas CO_2 Conc (%)
1	118,174	271.9	32.1	35.995	7.13	19.92
2	122,790	272.6	31.4	39.482	6.00	20.50
3	119,363	278.5	32.2	39.210	6.00	20.50
Avg	120,109	274.3	31.9	38.229	6.38	20.31

TABLE 13

RAW MATERIAL AND PRODUCT ANALYSIS

TDF TEST CONDITIONS

RINKER MATERIALS CORPORATION
MIAMI, FLORIDA

JANUARY 27, 1993

Metal	UNIT	PRODUCT CLINKER	RAW MEAL SLURRY	KILN 1 COAL	KILN 2 COAL	TDF FUEL	KILN 1 ESP DUST	KILN 2 ESP DUST
Antimony	(ug/g)	<40	<40	******	******	******	<40	<40
Arsenic	(ug/g)	8	<4	17	17	<1	<4	4
Barium	(ug/g)	89.0	49.0	******	******	******	8.0	89.0
Beryllium	(ug/g)	<2	<2	******	******	******	<2	<2
Cadmium	(ug/g)	6.0	5.0	******	******	******	5.0	10.0
Copper	(ug/g)	52.0	26.0	******	******	******	36.0	42.0
Chromium	(ug/g)	54.0	19.0	69.0	69.0	73.0	27.0	27.0
Lead	(ug/g)	70.0	32.0	65.0	65.0	29.0	88.0	255.0
Manganese	(ug/g)	837.0	170.0	******	******	******	177.0	170.0
Mercury	(ug/g)	<0.02	0.08	0.12	0.14	0.07	0.03	0.07
Nickel	(ug/g)	50.0	31.0	******	******	******	38.0	38.0
Selenium	(ug/g)	<4	<4	******	******	******	5	15
Sodium	(ug/g)	742	594	******	******	******	445	890
Potassium	(ug/g)	2656	2076	******	******	******	7306	27812
Chlorine	(% Wt)	0.08	0.02	******	******	******	0.11	0.67
Sulfur trioxide	(% Wt)	0.32	0.02	******	******	******	3.32	6.40

TABLE 14

FUEL ULTIMATE ANALYSIS

BASELINE AND TDF TEST CONDITIONS

RINKER MATERIALS CORPORATION
MIAMI, FLORIDA

JANUARY 27-29, 1993

Parameter	UNIT	Baseline KILN 1 COAL	Baseline KILN 2 COAL	TDF KILN 1 COAL	TDF KILN 2 COAL	TIRE COMPOSITE
Moisture	(%)	1.11	0.98	1.64	1.79	1.09
Carbon	(%)	74.74	75.03	71.39	70.29	82.16
Hydrogen	(%)	5.21	5.11	4.68	4.64	7.65
Nitrogen	(%)	1.42	1.46	1.38	1.38	0.53
Sulfur	(%)	1.33	1.32	1.36	1.41	1.56
Ash	(%)	9.54	9.55	12.11	13.18	3.06
Oxygen	(%)	6.65	6.55	7.44	7.31	3.95
Heating Value	(Btu/lb)	13543	13617	12882	12571	16379

TABLE 15

RAW MATERIAL AND PRODUCT ANALYSIS

BASELINE TEST CONDITIONS

RINKER MATERIALS CORPORATION
MIAMI, FLORIDA

JANUARY 29, 1993

Metal	UNIT	PRODUCT CLINKER	RAW MEAL SLURRY	KILN 1 COAL	KILN 2 COAL	KILN 1 ESP DUST	KILN 2 ESP DUST
Antimony	(ug/g)	<40	<40	******	******	<40	<40
Arsenic	(ug/g)	4	<4	10	11	6	<4
Barium	(ug/g)	89.0	8.0	******	******	28.0	89.0
Beryllium	(ug/g)	<2	<2	******	******	<2	<2
Cadmium	(ug/g)	6.0	5.0	******	******	12.0	9.0
Copper	(ug/g)	58.0	26.0	******	******	39.0	45.0
Chromium	(ug/g)	46.0	19.0	88.0	85.0	19.0	19.0
Lead	(ug/g)	70.0	51.0	65.0	84.0	330.0	274.0
Manganese	(ug/g)	289.0	167.0	******	******	160.0	170.0
Mercury	(ug/g)	<0.02	<0.02	0.09	0.09	0.20	0.09
Nickel	(ug/g)	50.0	38.0	******	******	31.0	44.0
Selenium	(ug/g)	<4	4	******	******	13	18
Sodium	(ug/g)	890	594	******	******	890	964
Potassium	(ug/g)	3321	2076	******	******	27397	32212
Chlorine	(% Wt)	0.01	0.03	******	******	0.93	0.94
Sulfur trioxide	(% Wt)	0.50	0.81	******	******	3.72	6.08

ATTACHMENT 4

TANKS 3.0 MODEL OUTPUT

nnual Emissions Report
LL Vertical Fixed Roof

Components	Emissions (lbs.)
Distillate fuel oil no. 2	190.42
Total:	190.42

TANK IDENTIFICATION AND PHYSICAL CHARACTERISTICS

dentification

Identification No.:	ALL
City:	Miami
State:	FL
Company:	RINKER
Type of Tank:	Vertical Fixed Roof
Description:	ALL TANKS

ank Dimensions

Shell Height (ft):	64.0
Diameter (ft):	60.0
Liquid Height (ft):	64.0
Avg. Liquid Height (ft):	64.0
Volume (gallons):	1353784
Turnovers:	4.0
Net Throughput (gal/yr):	5415136

aint Characteristics

Shell Color/Shade:	White/White
Shell Condition:	Good
Roof Color/Shade:	White/White
Roof Condition:	Good

oof Characteristics

Type:	Cone
Height (ft):	0.00
Radius (ft) (Dome Roof):	0.00
Slope (ft/ft) (Cone Roof):	0.0000

reather Vent Settings

Vacuum Setting (psig):	0.00
Pressure Setting (psig):	0.00

eteorological Data Used in Emission Calculations: Miami, Florida (Avg Atmospheric Pressure = 14.7 psia)

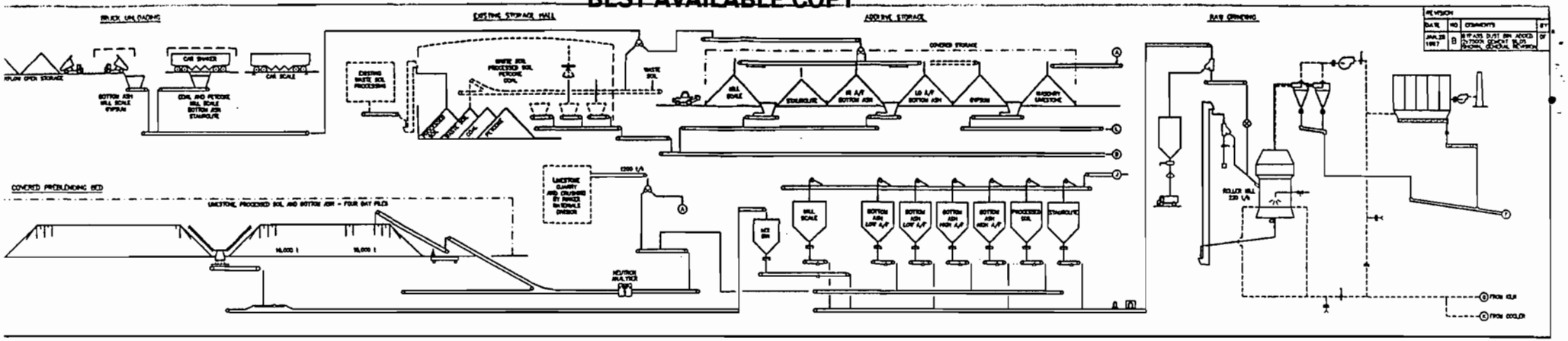
Mixture/Component	Month	Daily Liquid Surf. Temperatures (deg F) Avg.	Min.	Max.	Liquid Bulk Temp. (deg F)	Vapor Pressures (psia) Avg.	Min.	Max.	Vapor Mol. Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
Distillate fuel oil no. 2	All	77.59	73.34	81.84	75.62	0.0114	0.0100	0.0129	130.000			130.00	Option 3: A=12.1010, B=8907.0

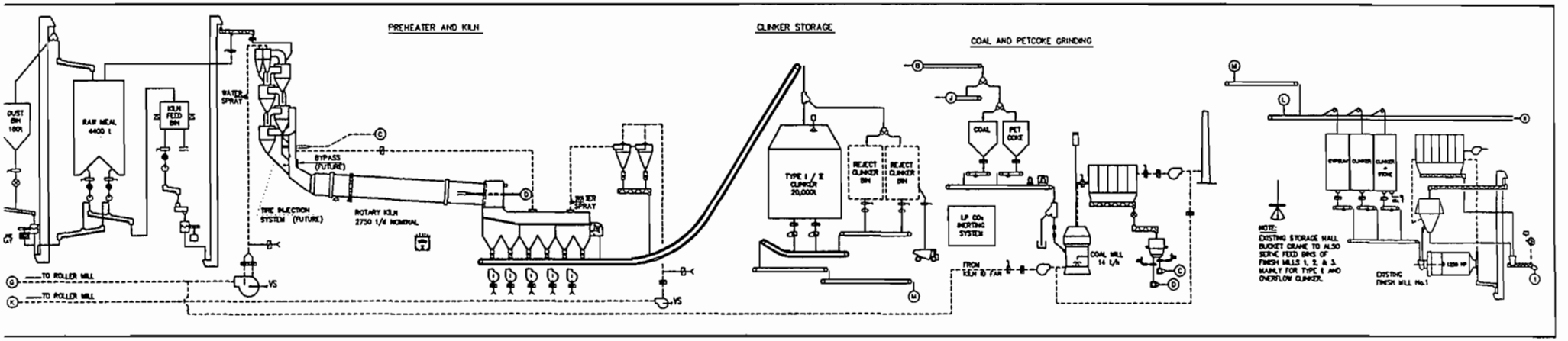
Annual Emissions Report

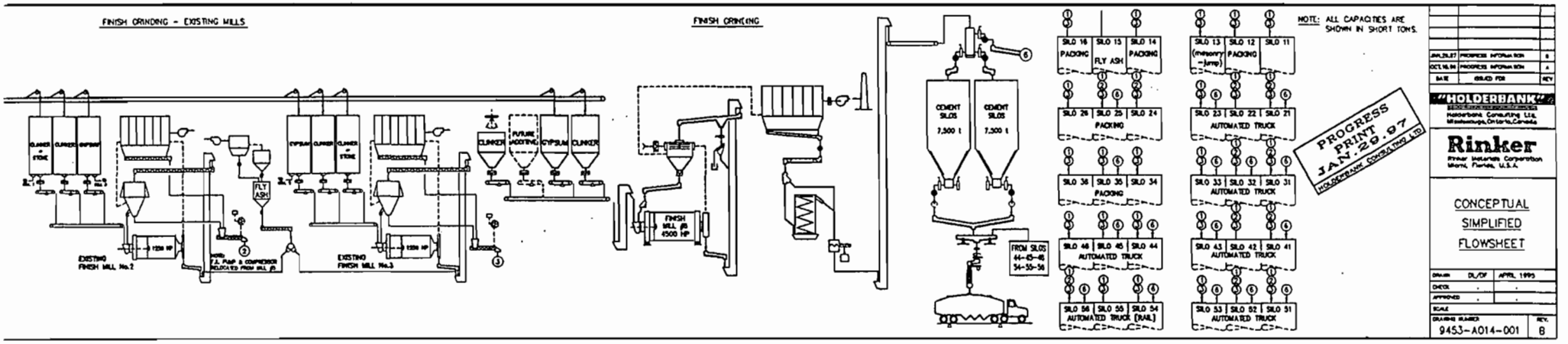
Liquid Contents	Losses (lbs.): Standing	Working	Total
Distillate fuel oil no. 2	0.00	190.42	190.42
Total:	0.00	190.42	190.42

ATTACHMENT 5

PROCESS FLOW DIAGRAM







REVISION			
DATE	NO	COMMENTS	BY
JAN.29 1997	B	8 SILOS IN FT. ERIE ADDED, 2 SILOS REMOVED, GENERAL REVISION	DF
OCT.16.96	A	PROGRESS INFORMATION	
DATE		ISSUED FOR	REV

HOLDERBANK
Holderbank Consulting Ltd.
Montmagny, Ontario, Canada

Rinker
Rinker Materials Corporation
Miami, Florida, U.S.A.

CONCEPTUAL SIMPLIFIED FLOWSHEET

DRAWN	DL/DF	APRIL 1995
CHECK	-	-
APPROVED	-	-
SCALE		
DRAWING NUMBER		REV.
9453-A014-001		B

ATTACHMENT 6

TYPICAL FUEL SPECIFICATIONS

TYPICAL FUEL SPECS

e	No. 1 Fuel Oil	No. 2 Fuel Oil	No. 4 Fuel Oil	No. 5 Fuel Oil	No. 6 Fuel Oil
	Distillate (Kerosene)	Distillate	Very Light Residual	Light Residual	Residual
r	Light	Amber	Black	Black	Black
gravity, 60 F	40	32	21	17	12
ific gravity, 60/60 F	0.8251	0.8654	0.9279	0.9529	0.9861
or U.S. gallon, 60 F	6.870	7.206	7.727	7 935	8.212
os., Centistokes, 100 F	1.6	2.68	15.0	50.0	360.0
os., Saybolt Univ., 100 F	31	35	77	232	—
os., Saybolt Furol, 122 F	—	—	—	—	170
r point, F	Below zero	Below zero	10	30	65
p. for pumping, F	Atmospheric	Atmospheric	15 min.	35 min.	100
p, for atomizing, F	Atmospheric	Atmospheric	25 min.	130	200
bon residue, per cent	Trace	Trace	2.5	5.0	12.0
fur, per cent	0.1	0.4–0.7	0.4–1.5	2.0 max.	2.8 max.
ygen and nitrogen, per cent	0.2	0.2	0.48	0.70	0.92
drogen, per cent	13.2	12.7	11.9	11.7	10.5
rbon, per cent	86.5	86.4	86.10	85.55	85.70
diment and water, per cent	Trace	Trace	0.5 max.	1.0 max.	2.0 max.
h, per cent	Trace	Trace	0.02	0.05	0.08
per gallon	137,000	141,000	146,000	148,000	150,000

Technical information from Humble Oil & Refining Company.

EPA 450/2-80-063

TYPICAL PARAMETERS OF VARIOUS FUELS[a]

Type of Fuel	Heating Value		Sulfur	Ash
	kcal	BTU	% (by weight)	% (by weight)
Solid Fuels				
Bituminous Coal	7,200/kg	13,000/lb	0.6-5.4	4-20
Anthracite Coal	6,810/kg	12,300/lb	0.5-1.0	7.0-16.0
Lignite (@ 35% moisture)	3,990/kg	7,200/lb	0.7	6.2
Wood (@ 40% moisture)	2,880/kg	5,200/lb	N	1-3
Bagasse (@ 50% moisture)	2,220/kg	4,000/lb	N	1-2
Bark (@ 50% moisture)	2,492/kg	4,500/lb	N	1-3[b]
Coke, Byproduct	7,380/kg	13,300/lb	0.5-1.0	0.5-5.0
Liquid Fuels				
Residual Oil	$9.98 \times 10^6/m^3$	150,000/gal	0.5-4.0	0.05-0.1
Distillate Oil	$9.30 \times 10^6/m^3$	140,000/gal	0.2-1.0	N
Diesel	$9.12 \times 10^6/m^3$	137,000/gal	0.4	N
Gasoline	$8.62 \times 10^6/m^3$	130,000/gal.	0.03-0.04	N
Kerosene	$8.32 \times 10^6/m^3$	135,000/gal	0.02-0.05	N
Liquid Petroleum Gas	$6.25 \times 10^6/m^3$	94,000/gal	N	N
Gaseous Fuels				
Natural Gas	$9,341/nm^3$	1,050/SCF	N	N
Coke Oven Gas	$5,249/nm^3$	590/SCF	0.5-2.0	N
Blast Furnace Gas	$890/nm^3$	100/SCF	N	N

[a]N = negligible.

[b]Ash content may be considerably higher when sand, dirt, etc. are present.

INCOMING COAL ORDERS

FROM: UNITED COAL

SHIPPED: FEBRUARY 15 1995

NUMBER ON RAIL CAR:

365330	///
806292	///
347749	///
803056	///
350111	///
365287	///
348502	///
813377	///
804238	//
350894	//

SEIVE ANALYSIS:

+3" =	
+2" =	
+1" =	
+3/4" =	
+1/2" =	
+1/4" =	
+1/8" =	
−1/2" =	
TOTAL=	

	SHIPPED ANALYSIS	RINKERS ANALYSIS
PERCENT H2O AS RECD.		4.70
BTU/LB. AS RECD.		12436
PERCENT SULFUR AS RECD.		1.69
PERCENT ASH AS RECD.		6.9

RINKER PORTLAND CEMENT

ORDER # _____ SHIP DATE: 2/21/94

SHIPPER South AMERICAN COAL

CAR INITIALS AND NUMBER.

1.		13.	
2.	5 BAGS —	14.	FROM PORT.
3.		15.	
4.		16.	
5.		17.	
6.		18.	
7.		19.	
8.		20.	
9.		21.	
10.		22.	
11.		23.	
12.		24.	

	SHIPPER ANALYSIS	OUR ANALYSIS
PERCENT H2O AS RECEIVED		3.87
BTU/LB AS RECEIVED		12494
PER CENT S AS RECD.		0.81
PER CENT ASH. AS RECD.		5.07

+ 3"	—
+ 2"	—
+ 1"	12.82
+ 3/4"	8.12
+ 1/2"	18.06
+ 1/4"	15.27
+ 1/8"	25.36
- 1/8	20.37
TOTAL	100

SIGNED _____

GEOCHEMICAL TESTING
a division of Energy Center, Inc.

RD2, Box 124
Somerset, PA 15501

814/443-1671
814/445-6666
FAX: 814/445-6729

COAL ANALYSIS REPORT

Client: RINKER MATERIALS CORP

Sampled by: MM

Sampling Date: 02/08/96 TO 02/08/96

Analyzed on: 04/13/96

Description: Pet Coke #1

LAB NO. 96-060256

		As Received	Dry	Dry Ash-Free
Total Moisture	D2961	5.66		
Ash	D3174	3.04	3.22	
Sulfur	D4239	3.81	4.04	
BTU/LB	D1989	14292	15149	15654

Free Swelling Index D720 1.0

Lbs Sulfur/Million Btu 2.67

Forrest E. Walker

Forrest E. Walker
Director of Technical Services

Materials Analysis Report

RINKER MATERIALS SUBSTITUTION

REPORT DATE	4/18/96
SAMPLE DATE	4/12/96
SAMPLE SOURCE	CBI
REFERENCE	01657
R.E.S. ID NUMBER	1424
SAMPLE TYPE	WASTE OIL

PARAMETER	RESULT	UNITS	METHOD	D. LIMITS
Flashpoint	75	Deg. F	1010	75
Arsenic	BDL	mg/l	206.3	1
Barium	BDL	mg/l	208.2	0.1
Cadmium	BDL	mg/l	213.2	0.1
Chromium	BDL	mg/l	218.2	0.1
Mercury	BDL	mg/l	245.1	0.01
Lead	BDL	mg/l	239.2	0.1
Selenium	BDL	mg/l	270.3	0.5
Silver	BDL	mg/l	272.2	0.1
Total Halides	510	mg/l		
% Total Water	<5			
Btu's/Lbs	18336	Btu's/Lbs		
% Water (free)	<0.1	%		
Chlor D Tect	Neg.	Pos/Neg		
Density	7.676	lbs/gal		
%Solids	<1	%		
Viscosity #2	26	sec		
601's	Neg.	mg/kg	(see attached)	
API @ 60*F	22			

ATTACHMENT 7

BAGHOUSE TABLE and APPLICATION PAGES

ATTACHMENT 7

			PROPOSED BAGHOUSES						
				Emission	Exit	Emissions Estimates			
Item	E.U.	Operation	ID	Basis	Flow Rate	PM		PM10	
					(acfm)	(lb/hr)	(tpy)	(lb/hr)	(tpy)
1	1	Soil Bin	DC	0.01 gr/cf	10000	0.86	3.75	0.73	3.19
2	1	Transfer	DC	0.01 gr/cf	7000	0.60	2.63	0.51	2.23
3	1	Add Bin	DC	0.01 gr/cf	20000	1.71	7.51	1.46	6.38
4	1	Raw Meal Silo	DC	0.01 gr/cf	12800	1.10	4.81	0.93	4.08
5	1	Raw Meal Silo	DC	0.01 gr/cf	16000	1.37	6.01	1.17	5.11
6	2	Main Kiln/Cooler/Raw Mill	BH	0.2 lb/ton	255000	44.00	192.72	37.40	163.81
7	1	Meal Transfer	DC	0.01 gr/cf	16000	1.37	6.01	1.17	5.11
8	3	Clinker Storage Silo	DC	0.01 gr/cf	4600	0.39	1.73	0.34	1.47
9	3	Clinker Pan Conveyer	DC	0.01 gr/cf	4600	0.39	1.73	0.34	1.47
10	3	Clinker Retrofit Silo	DC	0.01 gr/cf	4600	0.39	1.73	0.34	1.47
11	3	Clinker Discharge Transfer	DC	0.01 gr/cf	5700	0.49	2.14	0.42	1.82
12	3	Clinker Discharge Transfer	DC	0.01 gr/cf	5700	0.49	2.14	0.42	1.82
13	3	Feed Bin	DC	0.01 gr/cf	4600	0.39	1.73	0.34	1.47
14	3	Additional Transfer	DC	0.01 gr/cf	5700	0.49	2.14	0.42	1.82
15	3	Gypsum Bin Transfer	DC	0.01 gr/cf	5700	0.49	2.14	0.42	1.82
16	3	Flyash Bin	DC	0.01 gr/cf	7000	0.60	2.63	0.51	2.23
17	3	Clinker Mill (Pulse Type)	DC	0.01 gr/cf	27000	2.31	10.14	1.97	8.62
18	3	Separator (Pulse Type)	DC	0.01 gr/cf	72000	6.17	27.03	5.25	22.98
19	3	Mill Return Conveyer	DC	0.01 gr/cf	5700	0.49	2.14	0.42	1.82
20	3	Silo Feed Conveyer	DC	0.01 gr/cf	5700	0.49	2.14	0.42	1.82
21	1	Waste Soil	DC	0.01 gr/cf	4500	0.39	1.69	0.33	1.44
22	1	Waste Soil/Coal Transfer	DC	0.01 gr/cf	7000	0.60	2.63	0.51	2.23
23	1	Rail Transfer--rail cars	DC	0.01 gr/cf	5700	0.49	2.14	0.42	1.82
24	1	PM Transfer--Coal	DC	0.01 gr/cf	5700	0.49	2.14	0.42	1.82
25	1	PM Transfer--Gypsum	DC	0.01 gr/cf	5700	0.49	2.14	0.42	1.82
26	1	PM Feed Mill Transfer	DC	0.01 gr/cf	5700	0.49	2.14	0.42	1.82
27	1	PM Feed Mill Transfer	DC	0.01 gr/cf	5700	0.49	2.14	0.42	1.82
28	1	Coal Transfer	DC	0.01 gr/cf	5700	0.49	2.14	0.42	1.82
29	1	Coke/Coal Transfer	DC	0.01 gr/cf	10000	0.86	3.75	0.73	3.19
30	1	Soil Transfer	DC	0.01 gr/cf	20000	1.71	7.51	1.46	6.38
31	4	Coal Mill	DC	0.01 gr/cf	21000	1.80	7.88	1.53	6.70
32	4	Fuel Bin	DC	0.01 gr/cf	5700	0.49	2.14	0.42	1.82
				TOTAL	597800	73.4	321.4	62.4	273.2

Emissions Unit Control Equipment

A.

1. Description (limit to 200 characters): **Fabric Filters -- Low Temperature (T<180°F)**

Soil Bin
Waste Soil Handling
Waste Soil/Coal Transfer
Soil Transfer
Additive Bin
Additive Transfer
Rail Transfer
Coal Transfer
Coal Transfer
Gypsum Transfer
Raw Mill Transfer
Raw Mill Transfer
Raw Meal Silo
Raw Meal Silo
Raw Meal Transfer
Coke/Coal Transfer

2. Control Device or Method Code: **018**

E. EMISSION POINT (STACK/VENT) INFORMATION
(Regulated Emissions Units Only)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: **Baghouses**
2. Emission Point Type Code: [ ] 1 [ ] 2 [X] 3 [ ] 4
3. Descriptions of Emissions Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): **Baghouses for:** **Soil Bin** **Waste Soil Handling** **Waste Soil/Coal Transfer** **Soil Transfer** **Additive Bin** **Additive Transfer** **Rail Transfer** **Coal Transfer** **Coal Transfer** **Gypsum Transfer** **Raw Mill Transfer** **Raw Mill Transfer** **Raw Meal Silo** **Raw Meal Silo** **Raw Meal Transfer** **Coke/Coal Transfer**
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: **NA**
5. Discharge Type Code: [ ] D [ ] F [ ] H [ ] P [ ] R [ ] V [X] W
6. Stack Height: **NA** feet
7. Exit Diameter: **NA** feet
8. Exit Temperature: **77°F**

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Pollutant Detail Information: Pollutant 1 of 2

1. Pollutant Emitted: **PM**		
2. Total Percent Efficiency of Control:		**99%**
3. Potential Emissions:	**13.50** lb/hour	**59.1** tons/year
4. Synthetically Limited? [ ] Yes [**X**] No		
5. Range of Estimated Fugitive/Other Emissions: **Negligible due to material moisture** [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year		
6. Emission Factor: **0.01 gr/acf** Reference: **Specified performance level**		
7. Emissions Method Code: **[X]** 0 [ ] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5		
8. Calculation of Emissions (limit to 600 characters): **16 baghouses = 157,500 acfm** **157,500 acfm x 0.01 gr/acf ÷7000 grains/lb x 60 min/hr = 13.50 lb/hr** **@ 8760 hr/yr = 59.1 tpy**		
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):		

B. GENERAL EMISSIONS UNIT INFORMATION
(Regulated and Unregulated Emissions Units)

Emissions Unit Description and Status

1. Description of Emissions Unit Addressed in This Section (limit to 60 characters): **Raw Mill, Dry Process Cement Kiln with Preheater and Precalciner, and Clinker Cooler**		
2. Emissions Unit Identification Number: [X] No Corresponding ID [ ] Unknown		
3. Emissions Unit Status Code: **C**	4. Acid Rain Unit? [ ] Yes [X] No	5. Emissions Unit Major Group SIC Code: **32**
6. Emissions Unit Comment (limit to 500 characters):		

Emissions Unit Control Equipment

A.

1. Description (limit to 200 characters): **Fabric Filter - High Temperature (T > 250°F)** **Kiln, Cooler and Raw Mill Baghouse**
2. Control Device or Method Code: **016**

E. EMISSION POINT (STACK/VENT) INFORMATION
(Regulated Emissions Units Only)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: **Kiln, Cooler and Raw Mill Baghouse Stack**	
2. Emission Point Type Code: [X] 1 [ ] 2 [ ] 3 [ ] 4	
3. Descriptions of Emissions Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): **NA**	
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: **NA**	
5. Discharge Type Code: [ ] D [ ] F [ ] H [ ] P [ ] R [X] V [ ] W	
6. Stack Height:	**130** feet
7. Exit Diameter:	**8** feet

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Pollutant Detail Information: Pollutant __1__ of __5___

1. Pollutant Emitted: **PM**		
2. Total Percent Efficiency of Control:		**99%**
3. Potential Emissions:	**44.00** lb/hour	**192.7** tons/year
4. Synthetically Limited? [ ] Yes [**X**] No		
5. Range of Estimated Fugitive/Other Emissions: **NA** [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year		
6. Emission Factor: **0.2 lb/ton dry feed** Reference: **Process Knowledge**		
7. Emissions Method Code: **[X]** 0 [ ] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5		
8. Calculation of Emissions (limit to 600 characters): **0.2 lb/ton x 220 tph of dry kiln feed = 44.00 lb/hr** **@ 8760 hrs/yr = 192.7 tons/yr**		
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):		

Allowable Emissions (Pollutant identified on front of page)

A.

1. Basis for Allowable Emissions Code: **ESCPSD**		
2. Future Effective Date of Allowable Emissions: **NA**		
3. Requested Allowable Emissions and Units: **0.7 lb/MMBtu**		
4. Equivalent Allowable Emissions:	**305.90** lb/hour	**1339.8** tons/year
5. Method of Compliance (limit to 60 characters): **EPA Method 6**		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): **This limit is more stringent than that contained in the Dade County Code**		

B.

1. Basis for Allowable Emissions Code: **RULE** **Section 24-17(2)(a)(ii), Dade County Code**		
2. Future Effective Date of Allowable Emissions: **NA**		
3. Requested Allowable Emissions and Units:	**Solid Fuels 1.5 lb/MMBtu** **Liquid Fuels 1.1 lb/MMBtu**	
4. Equivalent Allowable Emissions: **Solid**	**655.50** lb/hour	**2871.1** tons/year
Liquid	**480.70** lb/hour	**2105.5** tons/year
5. Method of Compliance (limit to 60 characters): **EPA Method 6**		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):		

B. GENERAL EMISSIONS UNIT INFORMATION
(Regulated and Unregulated Emissions Units)

Emissions Unit Description and Status

1. Description of Emissions Unit Addressed in This Section (limit to 60 characters): **Clinker and Cement Handling and Storage**		
2. Emissions Unit Identification Number: [**X**] No Corresponding ID [ ] Unknown		
3. Emissions Unit Status Code: **C**	4. Acid Rain Unit? [ ] Yes [**X**] No	5. Emissions Unit Major Group SIC Code: **32**
6. Emissions Unit Comment (limit to 500 characters): **This emissions unit is for the handling and storage of clinker after the clinker cooler, the new finish mill, the handling and storage of cement; and the handling and storage of gypsum, limestone, and mineral aggregates for use in the finish mills.**		

Emissions Unit Control Equipment

A.

1. Description (limit to 200 characters): **Fabric Filters - High Temperature (T > 250°F)** **Clinker Pan Conveyor** **Clinker Silo** **Clinker Retrofit Silo**
2. Control Device or Method Code: **016**

B.

1. Description (limit to 200 characters): **Fabric Filters - Medium Temperature ($180^{\circ}F < T < 250^{\circ}F$)** **Clinker Discharge Transfer** **Clinker Discharge Transfer** **Finish Mill Feed Bin** **Additional Transfer** **Finish Mill No. 6** **Finish Mill Air Separator** **Finish Mill Return Conveyor** **Silo Feed Conveyor**
2. Control Device or Method Code: **017**

C.

1. Description (limit to 200 characters): **Fabric Filters - Low Temperature ($T < 180^{\circ}F$)** **Gypsum Bin Transfer** **Flyash Bin**
2. Control Device or Method Code: **018**

E. EMISSION POINT (STACK/VENT) INFORMATION
(Regulated Emissions Units Only)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: **Clinker Cooler and Finish Mill Area**	
2. Emission Point Type Code: [ ] 1 [ ] 2 [X] 3 [ ] 4	
3. Descriptions of Emissions Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): **Baghouses for the following activities:** **Clinker Pan Conveyor** **Clinker Silo** **Clinker Retrofit Silo** **Clinker Discharge Transfer** **Clinker Discharge Transfer** **Finish Mill Feed Bin** **Additional Transfer** **Finish Mill No. 6** **Finish Mill Air Separator** **Finish Mill Return Conveyor** **Silo Feed Conveyor** **Gypsum Bin Transfer** **Flyash Bin**	
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: **NA**	
5. Discharge Type Code: [ ] D [ ] F [ ] H [ ] P [ ] R [ ] V [X] W	
6. Stack Height: **NA**	feet
7. Exit Diameter: **NA**	feet

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Pollutant Detail Information: Pollutant 1 of 2

1. Pollutant Emitted: **PM**		
2. Total Percent Efficiency of Control:		**99%**
3. Potential Emissions:	**13.59** lb/hour	**59.5** tons/year
4. Synthetically Limited? [ ] Yes [**X**] No		
5. Range of Estimated Fugitive/Other Emissions: **NA** [ ] 1 [ ] 2 [ ] 3	_____ to _____	tons/year
6. Emission Factor: **0.01 gr/acf** Reference: **Specification for Baghouses**		
7. Emissions Method Code: [**X**] 0 [ ] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5		
8. Calculation of Emissions (limit to 600 characters): **158,600 acfm for 13 baghouses x 0.01 gr/acf x 60 min/hr x 1.0 lb/7000 gr = 13.59 lbs/hr @ 8760 hrs/yr = 59.5 TPY**		
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):		

B. GENERAL EMISSIONS UNIT INFORMATION
(Regulated and Unregulated Emissions Units)

Emissions Unit Description and Status

1. Description of Emissions Unit Addressed in This Section (limit to 60 characters): **Coal/Coke Mill & Bin**		
2. Emissions Unit Identification Number: [X] No Corresponding ID [ ] Unknown		
3. Emissions Unit Status Code: **C**	4. Acid Rain Unit? [ ] Yes [X] No	5. Emissions Unit Major Group SIC Code: **32**
6. Emissions Unit Comment (limit to 500 characters): **This emissions unit is the Coal Mill for grinding and drying coal and petroleum coke before conveying to a storage bin.**		

Emissions Unit Control Equipment

A.

1. Description (limit to 200 characters): **Fabric Filters - Low Temperature (T < 180°F)** **Coal/Coke Mill** **Coal/Coke Bin**
2. Control Device or Method Code: **018**

E. EMISSION POINT (STACK/VENT) INFORMATION
(Regulated Emissions Units Only)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: **Coal Mill**	
2. Emission Point Type Code: [ ] 1 [ ] 2 [X] 3 [ ] 4	
3. Descriptions of Emissions Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): **Baghouses for:** **Coal/Coke Mill** **Coal/Coke Bin**	
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: **NA**	
5. Discharge Type Code: [ ] D [ ] F [ ] H [ ] P [ ] R [X] V [ ] W	
6. Stack Height:	**160** feet
7. Exit Diameter:	**3** feet
8. Exit Temperature:	**176**°F

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Pollutant Detail Information: Pollutant 1 of 2

1. Pollutant Emitted: **PM**		
2. Total Percent Efficiency of Control:		**99%**
3. Potential Emissions:	**2.29** lb/hour	**10.0** tons/year
4. Synthetically Limited? [ ] Yes [X] No		
5. Range of Estimated Fugitive/Other Emissions: **NA** [ ] 1 [ ] 2 [ ] 3	_____ to _____ tons/year	
6. Emission Factor: **0.01 gr/acf** Reference: **Specification for Baghouses**		
7. Emissions Method Code: [X] 0 [ ] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5		
8. Calculation of Emissions (limit to 600 characters): **21,000 acfm for coal mill baghouse x 0.01 gr/acf x 60 min/hr x 1.0 lb/7000 gr = 1.80 lbs/hr @ 8760 hrs/yr = 7.9 TPY** **5700 acfm for coal bin baghouse x 0.01 gr/acf x 60 min/hr x 1.0 lb/7000 gr = 0.49 lbs/hr @ 8760 hrs/yr = 2.1 TPY** **TOTAL = 0.49 + 1.80 = 2.29 lb/hr** **@ 8760 hr/yr = 10.0 TPY**		
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):		

Withdrawn

1/29/1999

0250014-006-AC

Berger
Davis &
Singerman
Professional Association

215 South Monroe Street Suite 705
Tallahassee, Florida 32301
Phone: 904.561.3010
Fax: 904.561.3013

December 31, 1998

Jeffrey Brown
Assistant General Counsel
Florida Department of Environmental Protection
2600 Blairstone Road, MS-35
Twin Towers
Tallahassee, Florida 32301

Re: In the Matter of an Application for Permit Modification by Rinker Materials Corporation, DEP File No. 0250014-006-AC

Dear Jeff:

This letter is a follow up to our recent conversations regarding Rinker's request for extension of time to file a petition for administrative hearing regarding the Department's Intent to Issue the above-referenced permit. On behalf of Rinker, our firm filed the request approximately two weeks ago. While we have not yet received a written order from the Department, I understand from talking to you that the Department will be granting an extension until January 31. I also understand from you that the Department is willing to meet with Rinker on January 22, 1999, to discuss possible resolution of the disputes between the parties. While no time or date has been finazlied as yet, we would prefer the meeting to be that day in the mid to late morning, although we can accommodate Department schedules otherwise.

When we last spoke, you requested that I provide you with an agenda of the meeting. While not writing this in the form of a formal agenda, I believe the following list of issues will be helpful in establishing what topics Rinker anticipates discussing at the meeting, as well as in providing guidance as to who Rinker plans to bring and would like the Department have in attendance at the meeting. There may be some additional items that Rinker may want to address, but the following generally represents the main issues of concern.

In summary, Rinker has the following concerns about the Department's proposed action, all of which it would like to discuss at the meeting:

1. Whether the Department should amend Rinker's existing construction permit to provide that whole tires and tire derived fuels be reduced from up to 40 per cent of heat input to up to 30 per cent. Yes, addressed in technical evaluation - to test ever been done in this type of plant at > 25% tires

may be can be 21% tires

to dept's knowledge

EPA says cement plants still under Sect 129

2. Whether the Department should reduce combustion of non-hazardous solid waste to 11 tons a day. 30% solid waste, including sewage sludge allowed in permit

3. Whether the Department should require additional record keeping to document compliance with non-hazardous waste combustion requirements. was in Eb. Extra record keeping was volunteered by applicant any way (Good Faith)

4. Whether Rinker should be allowed to have its existing construction permit amended to state that it authorizes combustion of non hazardous solid waste, oil filters, booms and rags from non hazardous petroleum spill clean up and oil filters generated off site. will give them that. It is in the proposed permit

5. Whether the Department has the legal authority to require permit changes that make Rinker's construction permit more stringent, even though such changes were not requested by Rinker ← irrelevant as part of its permit application, and if so what criteria do the Department have to meet to justify imposition of the changes. Dept does not believe they can meet limits at 40%. Dept know at what point, in Eb opinion only 10% Kiln exit temperature in question at these rates Can kiln precalciner act as afterburner at high rates.

6. Whether the Department has properly interpreted 40 CFR 60, Subpart Eb, and other applicable federal regulations, so as to support its apparent conclusion that federal regulations require reduction in the combustion of municipal solid waste as currently permitted by the Department in Rinker's air construction permit. Eb does not apply to cement plants, however it gave us reasonable assurance that they could burn small amts of solid waste we are allowing removal of kiln temp requirements

7. Whether the Department rules require that Rinker publish notice of the proposed agency action. Need to. All const must be public noticed.

8. Whether the Department has the legal authority to request new and additional information from Rinker (such as in its May 5 letter) regarding permit modification issues more than 30 days after Rinker's submission of it original application to make changes to the construction permit, or more than 30 days after any response by Rinker to a request for additional information made by the Department within 30 days of the original application. Similarly, whether the Department has legal authority to base any of its agency action in this matter on Rinker's failure to submit additional information subsequently requested by the Department after the last 30-day request for additional information. Got info on 4/10/98 (red 4/13) finally request in this info out on 5/5. They gave us waiver from 6/12 to August 12. Got another waiver till 10/12, Oct 12 to Nov 30

9. Whether the Department can base any of its agency action on Rinker's failure to provide information regarding matters about which the Department did not ask during its review of Rinker's original air construction permit application. Yes, as it was processed as modification

10. Whether Rinker can provide information, either at the meeting or within a reasonable period of time following the meeting, to resolve disputed issues with the Department in a matter which would avoid further contention over the preceding issues identified. Fuller, FLS

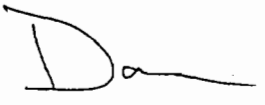
While this list is not intended necessarily to be exhaustive, it is designed to provide the best summary at this time of the issues likely to be brought up by Rinker at the meeting. As you can see, the issues raised go beyond purely technical issues relating to the pending application, and address significant policy and legal issues, such as whether the Department should be able to modify permit conditions in an unrequested manner, when publication of notice should be required, and what limitations should be imposed on cement kilns for the incineration of municipal solid waste. Therefore, Rinker respectfully requests that the meeting include attendance by Howard Rhodes, Clair Fancy, Al Linero, whoever is involved in permit processing for this matter, and yourself and/or

some other appropriate representative from the Office of General Counsel. Rinker tentatively plans to have in attendance Mike Vardeman, Scott Benyon, John Koogler, myself, and possibly an additional consultant or consultants who can address some of the technical questions raised by the Department in its May 5 request for additional information, including information about cement kiln combustion elsewhere in the country.

At the same time, Rinker does not necessarily need to resolve all of the issues raised in this letter, provided a mutually satisfactory accord can be reached. Furthermore, while Rinker has raised some legal concerns regarding the appropriateness of the Department's asking for certain information or proposing certain permit changes, Rinker would like to satisfy the Department's concerns without having to argue over the legal concerns. Hopefully we can resolve this matter in a mutually satisfactory manner.

As I mentioned to you recently, I shall be out of town the first two weeks of January. I appreciate the Department's courtesy in not requiring Rinker to file any further documents relating to its request for extension of time during this time period. I will follow up with you on January 15 or 20 to make sure arrangements are still set. If there are any changes or other actions that need Rinker's immediate attention during this time, please contact Mike Vardeman or John Koogler. Thank you.

Yours truly,



Daniel H. Thompson

DHT/wsg
cc: Mike Vardeman
Scott Benyon
John Koogler

Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

December 1, 1998

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:

Please replace the enclosed pages (14 and 16) to the November 30, 1998 Technical Evaluation and Preliminary Determination in your possession.

If you have any questions regarding this matter, please contact me or Clay Whitfield at 850/488-0114.

Sincerely,

Teresa Heron

Teresa Heron
New Source Review Section

TH/cw

cc: Greg Worley, EPA
John Bunyak, NPS
John Koogler, P.E.
H. Patrick Wong, DERM
Jose Gonzalez, DERM
Isidore Goldman, SED

Z 333 612 564

US Postal Service

Receipt for Certified Mail

No Insurance Coverage Provided.

Do not use for International Mail *(See reverse)*

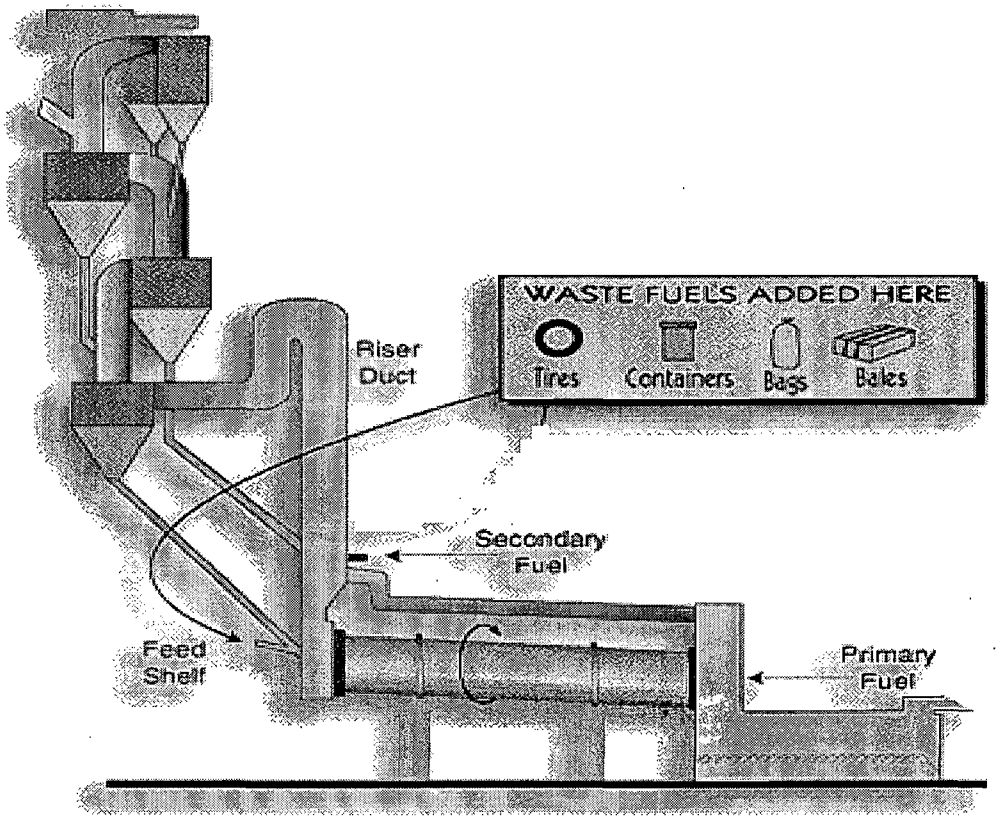
Sent to James Jenkins III	
Street & Number Rinker	
Post Office, State, & ZIP Code Miami	
Postage	$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	$
Postmark or Date 12-1-98	

PS Form **3800**, April 1995

Rinker's consultant presented a letter at the meeting in response to the Department's May 5 information request.[33] Following are Rinker's responses, dated October 26, 1998. These are paraphrased in some cases and numerically arranged per the 10 items in the Department's request:

1. - 3. Declaratory. No response necessary.

4. All solid supplemental material will be introduced in the vicinity of the feed shelf, as depicted in the drawing, *"A typical Precalciner Cement Kiln,"* included as Attachment 1.



5. Declaratory. No response necessary.

6. Rinker has reasonable assurance that tire-derived fuel could exceed 25 percent of the pyroprocessing system's heat input and approach 40 percent while meeting all applicable emission standards and producing acceptable clinker. Rinker claims that heat input has exceeded 45 percent during "practice compliance runs" on its existing wet process kilns. Rinker believes that other cement producers are constrained in heat input from tires for various reasons (including fuel and tire availability, raw materials, air flow, production parameters, etc.)

7. Tires and tire-derived fuel will be introduced in the vicinity of the feed shelf. This will allow the precalciner to act as an afterburner. The establishment of a temperature to replace the temperature requirement is of little practical value.

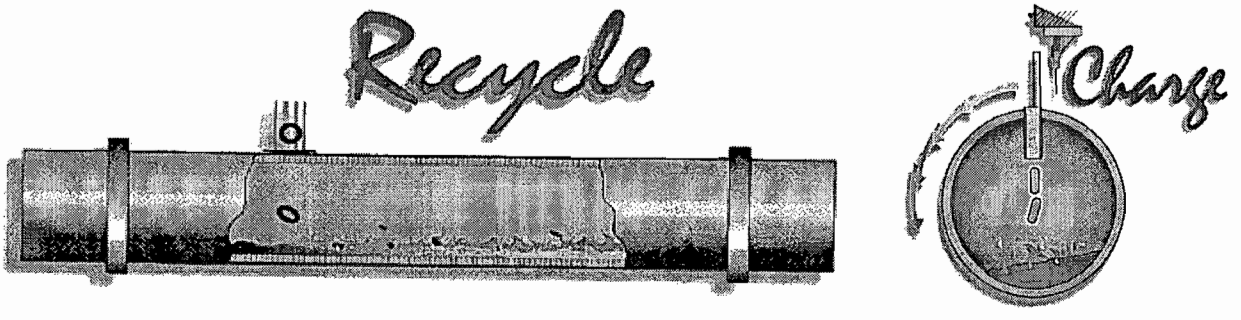
The Department contacted EPA regarding the test information collected in preparation of the proposed cement industry MACT Rule. The project officer could not cite a single example of any significant amounts of municipal solid wastes burned at cement kilns in the United States.[35]

The Department had previously relied extensively on statements by Rinker and its consultants regarding the ability to burn significant amounts of wastes in the proposed kiln. As a result of the lack of specific information regarding the amounts and the manner by which the various wastes will be burned, the Department conducted its own evaluation in determining whether reasonable assurance exists that such wastes can be properly handled by Rinker. Following is the updated assessment by the Department:

Tire Burning

The Department found no case of a cement kiln actually combusting more than 30 percent tires as fuel. Several cement kilns were found in California that had burned or tested tires and tire derived fuel. The tests ranged between 18 and 25 percent of the heat input to pyroprocessing.[36] Information from an EPA document listed tire burning at kilns in Florida, California, Oregon, Texas, South Carolina, Washington, Ohio, and Virginia. No kiln was tested while operating at more than 25 percent tires and tire derived fuel. According to tests at the Calaveras facility in California, low NO_X emissions (1.6 pounds per ton of clinker) were realized while firing tires.

The permit at the existing Rinker wet process cement facility allows use of up to 40 percent tires, but was tested only at 30 percent. The Department observed during a site visit that Rinker installed a system made by or similar to a "fork" system manufactured by Cadence.[37] The system looks like the following pictures from Cadence website:



The system observed by the Department engineer appeared to have an adequate delivery system (not shown above). So far no details have been provided regarding the system to be employed for the new kiln even though the kiln has reportedly been delivered to the site. To-date, Rinker has not acknowledged the manufacturer of the kiln or any details about the solid waste handling systems.

Notwithstanding the lack of information, the Department accepts that Rinker has sufficient experience burning tires to provide reasonable assurance that it will be properly done. The consultant described the mechanism adequately at an administrative hearing for the Florida Rock Cement Plant.[38]

Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

November 30, 1998

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:

Enclosed is one copy of the Draft Air Construction Permit Modification for Rinker Materials Corporation's cement plant reconstruction project at 1200 Northwest 137th Avenue in Miami, Dade County. 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" are also included.

The "PUBLIC NOTICE OF INTENT TO ISSUE AIR CONSTRUCTION PERMIT MODIFICATION" must be published as soon as possible in a newspaper having general circulation in Dade County. Proof of publication, i.e., newspaper affidavit, must be provided to the Department's Bureau of Air Regulation office within 7 (seven) days of publication. Failure to publish the notice and provide proof of publication within the allotted time may result in the denial of the permit.

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 above letterhead address. If you have any other questions, please contact Ms. Teresa Heron or Mr. Linero at 850/488-0114.

Sincerely,

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

CHF/th/t

Enclosures

In the Matter of an
Application for Permit Modification by:

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

DEP File No. 0250014-006-AC
Dry Process Cement Plant
Revision of Waste Fuel and Monitoring Conditions
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 permit revisions, detailed in the application specified above, for the reasons stated below.

The applicant, Rinker Materials Corporation (RMC), applied on September 30, 1997 to the Department of Environmental Protection for modification of certain conditions in its air construction permit related to use of waste fuels and monitoring at the planned cement plant reconstruction project located at 1200 NW 137th Avenue in Miami, Dade County.

The Department has permitting jurisdiction under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, and 62-212. The above actions are not exempt from permitting procedures. The Department has determined that a permit modification is required to revise the conditions of the approved air construction permit for the reconstruction project at the described facility.

The Department intends to issue this air construction permit modification based on the belief that reasonable assurances have been provided 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, 62-296, and 62-297, F.A.C.

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 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 the 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 thirty 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 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. 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; and (f) A demand for relief.

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. 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.

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, REVISED TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION and DRAFT permit modification) was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on 11/30/98 to the person(s) listed:

James S. Jenkins, III, RMC *
Greg Worley, EPA
John Bunyak, NPS
John Koogler, P.E.
H. Patrick Wong, DERM
Jose Gonzalez, DERM
Isidore Goldman, SED

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.

Charlotte J. Hayes 11/30/98
(Clerk) (Date)

PUBLIC NOTICE OF INTENT TO ISSUE AIR CONSTRUCTION PERMIT

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

NOTICE TO BE PUBLISHED IN THE NEWSPAPER

DEP File No. 0250014-006-AC
Rinker Materials Corporation
Dade County

The Department of Environmental Protection (Department) gives notice of its intent to issue a permit modification to Rinker Materials Corporation (RMC) for revisions of certain conditions in its air construction permit related to burning of waste fuels and monitoring at the cement plant modernization project under construction at 1200 Northwest 137th Avenue in Miami, Dade County. A review for the Prevention of Significant Deterioration (PSD) and a Best Available Control Technology (BACT) determination were not required pursuant to Rules 62-212.400, F.A.C. The applicant's name and address are: Rinker Materials Corporation, 1200 Northwest 137th Avenue, Miami, Florida 33182.

On September 30, 1997, the applicant, Rinker Materials Corporation (RMC), requested revisions of its air construction permit which was issued on September 11, 1997. The original permit authorized replacement of two "wet process" cement kilns and associated clinker coolers having an annual capacity of 650,000 tons per year (TPY) with a single 1,200,000 TPY "dry process" coal and petroleum coke-fired kiln including preheater, precalciner, and clinker cooler. Annual emission limits and actual emissions will be generally reduced or increased by an insignificant amount as a result of the planned project. The original notice was published in the Miami Herald on June 28, 1997 and referenced use of tires and used oil as fuels, as well as processing of oil filters, booms, rags, unused diapers, non-chlorinated plastic wastes, and sewage sludge.

The revised permit will: exclude burning of sewage sludge; establish specific limits on the amounts of the waste materials burned; specify the feed point for tires and wastes into the kiln; set limits for halogen concentrations in used oil; allow burning of off site generated used oil; and delete a temperature kiln requirement rendered unnecessary by these revisions. Clarifications will be made regarding the method to estimate exhaust gas flow and that cement plants have been specifically exempted by the USEPA from the requirements of 40CFR60, Subpart Eb, Standards of Performance for Large Municipal Combustors.

No hazardous waste will be burned on the site. All cement kiln dust will be recycled into the clinker product. Pollution control equipment consists of a common fabric filter system (baghouse) for particulate emissions from the kiln and cooler; absorption of sulfur compounds and metals into the product; combustion controls for volatile organic compounds and carbon monoxide; indirect firing, multiple burn points and other combustion controls for nitrogen oxides; and baghouses for particulate emissions from other process emission units.

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 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 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. 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; and (f) A demand for relief.

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. Environmental Protection Bureau of Air Regulation 111 S. Magnolia Drive, Suite 4 Tallahassee, Florida, 32301 Telephone: 850/488-0114 Fax: 904/922-6979	Dade County Department of Environmental Resources Mgmt 33 SW Second Avenue, Suite 900 Miami, Florida 33130-1540 Telephone: 305/372-6925 Fax: 305/372-6954	Dept. of Environmental Protection Southeast District Office 400 North Congress Avenue West Palm Beach, Florida 33401 Telephone: 407/681-6600 Fax: 407/681-6755

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

TECHNICAL EVALUATION

AND

PRELIMINARY DETERMINATION

RINKER MATERIALS CORPORATION
MIAMI, DADE COUNTY, FLORIDA

Portland Cement Manufacturing Facility
Modernization and Expansion Project
Revision of Fuel Combustion and Monitoring Conditions

Permit No. 0250014-006-AC

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

November 30, 1998

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 (O_3) 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 (RMC) 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 of Chapter 62-212, F.A.C., "Major Facility Categories." Therefore, stack and fugitive emissions of over 100 TPY of carbon monoxide (CO), volatile organic compounds (VOC), sulfur dioxide (SO_2), nitrogen oxides (NO_X), or particulate matter (PM/PM_{10}) 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, modifications at the facility resulting in emissions increases greater than 40 TPY of NO_X or SO_2, 7 TPY of SAM, 25/15 TPY of PM/PM_{10}, 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 is expected to 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. The changes resulting from this additional permit revision are not subject to PSD review.

The approved modernization constituted a reconstructed Major Source of HAPs because emissions of hydrogen chloride exceed 10 TPY. The industry is on a key list for which Maximum Achievable Control Technology (MACT) standards will be promulgated by the USEPA. The approved modernization was not subject to the requirements of Section 112(g) of the Clean Air Act requiring case-by-case MACT determinations by states for new or reconstructed Major Sources of HAPs when a standard has not yet been proposed by EPA. The requirements of the rule, incorporated into Rule 62-204.800, F.A.C., became effective on July 1, 1997, which is after the date of issuance of the Department's Intent. It was clarified in the Final Determination that the modernization permit does not constitute a MACT determination.[1] Instead, the facility will be subject to the requirements of EPA's future cement industry MACT as an existing facility.[2]

The facility is also subject to 40 CFR Subpart F, New Source Performance Standards (NSPS) for Portland Cement Plants, incorporated by reference in Rule 62-204.800, F.A.C. At the time the modernization permit was issued, the facility was subject to at least the co-fired combustor reporting requirements of 40 CFR 60, Subpart Eb, Standards of Performance for Municipal Waste Combustors for Which Construction is Commenced After September 20, 1994.

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 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.

The existing 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.

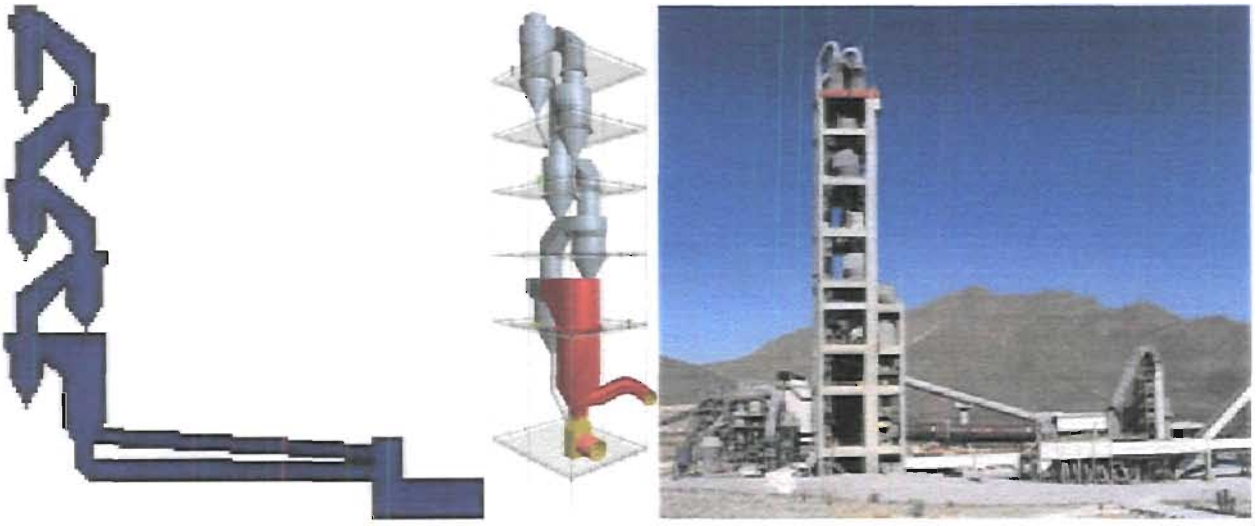
The modernized plant will include limestone crushing, limestone premixing and storage, raw grinding, blending and kiln feed, pyroprocessing, clinker storage, coal grinding, and additional finish mill and cement transport to existing silos. The existing quarry operation, soil dryer, five finish mills,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

The specific description of the modernization project given in the original application is as follows:[3]

- 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.

IV. PROCESS DESCRIPTION

A complete process description provided in the Technical Evaluation and Preliminary Determination issued for the modernization project on June 23, 1997. Although Rinker has not formally advised the Department of the precise manufacturer, the pyroprocessing equipment is believed to be a Fuller kiln with a preheater tower including an in-line calciner. Following are diagrams and a picture of such an arrangement:[4]



In the above arrangement, the raw materials flow downward through the tower and from left to right through the kiln. The materials are progressively heated, calcined and converted to the various compounds comprising clinker. The product clinker is discharged into the cooler which is

to the right of the kiln. Fuel is provided primarily through the main burner on the hot (right) side and separately to the calciner which is the larger vessel toward the bottom of the tower. Tertiary air is provided from the cooler to the calciner via the duct shown above the kiln. The maximum gas temperature occurs in the vicinity of the main burner and is progressively lower from right to left and from the bottom of the tower to the top.

V. FUELS AND RAW MATERIALS

According to the report accompanying the application, raw materials include limestone, waste soil, bottom ash, staurolite, mill scale, gypsum, Krome rock, and fly ash.[5]

According to the original application, the fuels to be combusted are coal, petroleum coke, natural gas, LPG, No. 2 fuel oil, residual oil, used oil, and solid waste. The solid waste was described as "combustion of non-hazardous solid waste at up to 40 percent of heat input, including but not limited to:"

- Whole tires and/or tire-derived fuel (TDF)
- Oil filters
- Booms and rags from spill cleanup
- Unused diapers
- Paper products
- Plastics waste from non-chlorinated plastics
- Sewage sludge from publicly owned treatment works

Following receipt of the original application, the Department requested that Rinker "explain how the listed fuels are going to be used (start up, main, supplementary, or emergency fuels) and the proposed annual heat input usage (20%, 40%, etc.). If these fuels have been permitted before, list the permit number and state the specific condition that restricted fuel usage (rate, sulfur content, etc.)."[6]

The following information was provided within Rinker's response:[7]

Fuel	Use	Percent Heat		Permit	Restrictions
		Proposed	1993-96	AO13-233208	
Natural Gas	Startup, Supplemental	100	2-10	Description a), SC 8	None
Coal	Main	100	0-74	Description a), SC 8	None
Pet Coke	Main	100	0-73		
Propane	Supplemental	100	0	Description a), SC 8	None
No. 2 Fuel Oil	Startup, Supplemental	100	0	Description a), SC 8	Virgin Oil
Residual Oil	Supplemental	100	0	Description a), SC 8	Virgin Oil
Used Oil	Supplemental	100	13-25	Description a), SC 8	On or Off-Spec
Tires, Other	Supplemental	40	1-2	Description b), SC 8	Whole Tires, 40 % Heat

The Department noted that "based on our records (e.g. AO13-172954) it appears that these wastes (diapers, paper, plastics, and sewage sludge) were not permitted before" and requested the following information:[8]

- Test data or estimates from other cement kilns burning these types of waste

- Source and quantity of unused diapers
- Source, type, and quantity of paper products to be burned
- Source, type, and quantity of non-chlorinated plastics
- Percentage and amount of sewage sludge (dry basis)
- Percentage of heat input from each waste

Rinker identified no test data, emissions estimates, source, or quantity for diapers, plastics or paper. No information was provided regarding sewage sludge except that Rinker referred the Department to a report believed to be in Department files from Florida Crushed Stone.[9]

VI. ORIGINAL PERMIT CONDITIONS

Although Rinker has burned a very minimal amount of tires in recent years, the Department assumed that the facility would actually burn up to about 30 percent tires. This is a reasonable practical limit which is equal to the percentage burned during testing conducted by Rinker in 1993, but less than the permitted limit of 40 percent at the existing wet process plant.[10] The Department assumed that sewage sludge would at times significantly contribute to the overall amount of solid waste fired in the kiln. It was known that injection of sewage sludge into a section of the preheater/calciner arrangement has been practiced at Mitsubishi Cement in California with at least some ammonia-based NO_X control.[11]

The Department basically assumed that a 40 percent limit by heat input would suffice to allow Rinker the flexibility to burn 30 percent tires, 10 percent sewage sludge, and *minimal* amounts of other materials including paper, plastics, unused diapers, and *on-site generated* oil spill cleanup material. Conditions regarding solid waste fuels are given in the approved modernization permit are as follow:[12]

- 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.
- 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.
- Combustion of non-hazardous solid waste (up to 30% 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.
- 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.

At the time that the permit was issued, cement plants were included in the proposed NSPS for municipal waste combustors.[13] The Department limited the amount of *municipal* solid waste to 30 percent or less (by weight) to provide a federally-enforceable limitation to insure that only the Co-fired Combustor Reporting Requirements applied. Such a condition was previously included in permit revisions for Osceola and Okeelanta Cogen facilities that burn primarily bagasse,

vegetative waste, and small amounts of yard waste. The latter can be construed to be municipal solid waste and, without the 30 percent limit, subject the facilities to all of the provisions of Subpart Eb.

Additionally, the Rinker facility could not have practicably burned more than 10 megagrams per day (11 TPD) of materials that can be construed as municipal solid waste. This is based on 40 CFR 60, Subpart Eb, Section 60.50b., Applicability and Delegation of Authority which 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 original Technical Evaluation indicated that Chapter 24 of the Dade County Code is applicable to this project. Chapter 24 prohibits resource recovery and management facilities within well field protection areas.[14] According to the Dade County Code, a Resources Recovery and Management Facility means:[15]

> *Any facility the purpose of which is disposal, recycling, incineration, processing, storage, transfer, or treatment of solid or liquid waste; but for the purpose of permitting does not include sewage treatment, industrial waste treatment, or facilities exclusively within State or Federal jurisdiction.*

Clearly the purpose of the facility is to make cement. However as the amount and variety of solid waste is increased, additional "facilities" are required to receive, store, transfer and incinerate solid waste. Dade County can evaluate the purpose of the main facility and support facilities in accordance with its rules and ordinances.

VII. INITIAL PERMIT REVISIONS REQUESTED

The Department issued the Intent and Draft Permit on June 23, 1997. Rinker did not comment on any conditions related to fuels or solid waste. The Department and Rinker had continuing discussions regarding the applicability or non-applicability of Section 112(g) of the Clean Air Act.[16] This matter was resolved. On September 11, 1997, the Department issued the Final Permit with the standard (District Court) appeal language.

On September 30 the Department received a request from Rinker for an extension of the time to comment on the final permit and a separate request to incorporate "a few administrative comments regarding the permit; none of which will change the intent of the permit, the way the plant is operated or emissions from the plant."[17, 18] The changes requested were are as follows:

- 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.

The comment period extension request was rescinded by Rinker by a letter received on October 27, 1997 after learning that the comment period does not apply to final permits.[19] The Department informed Rinker that it was necessary to submit a $250 fee to process the request for the changes.[20] After receiving the fee, the Department evaluated the request as a new application.

VIII. EVALUATION OF INITIAL REVISION REQUEST

The Department issued an Intent, Public Notice, Draft Permit Modification, and a Technical Evaluation and Preliminary Determination basically agreeing with all of Rinker's requests. A more specific provision was included to insure the total amounts of all solid wastes would remain minimal as understood by the Department and as required by Subpart Eb to avoid the municipal waste combustor emission limits. The limit was specifically proposed at 10 megagrams per day as discussed above.[21] It was implicit in the original permit for the reasons previously mentioned.

Prior to issuance of the Intent, the Department contacted Rinker's consultant to discuss whether there was any urgency in modifying the permit and to advise that the Department would include the proposed waste limitation. The consultant raised no objection to the proposed limit and indicated no urgency in receiving the modification.[22]

Spill Cleanup Materials

In its September 26, 1997 letter request, Rinker stated that "it has never been the intention of Rinker to have these materials limited to on-site generated materials." The Department, as discussed above, had reason to believe that only minimal amounts of any solid wastes, except tires and sewage sludge would be burned. It was assumed that the need to burn spill materials derived from on-site contingency plans. The original application showed no plans for receiving and handling equipment for such materials.

In the February, 1998 Technical Evaluation pursuant to the letter request, the Department indicated its intent to allow processing of off-site generated materials.

The Department indicated that the (small quantities) of these materials are readily destroyed at the very high kiln temperature. Additionally, the Department indicated its opinion that the precalciner acts "much like an afterburner by further incinerating incompletely burned gases." This clearly indicates that the Department understands that these materials are to be burned in the kiln rather than in the precalciner.

Kiln Temperature Requirement

The current permit requires that kiln temperature reaches at least 1400 °F prior to introduction of tires. Thereafter the permit requires that gases exiting the kiln be maintained at a minimum temperature of 1750 °F. The rational is given in the Technical Evaluation accompanying the draft of the current permit. It states:

> *"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."*

With the understanding that the tires would be fed directly into the kiln, and with the pre-calciner acting much as an afterburner, the Department determined that the kiln temperature requirement can be dropped. The temperatures in the precalciner (actually an in-line calciner) will reach at least 1750 °F obviating the need for a high temperature at the kiln exit. This is discussed in the first technical evaluation following the letter revision request. The Department still considers this conclusion to be proper as long as tires are introduced directly into the kiln, rather than into the precalciner or duct riser.

It is noted that a description of the equipment or the manner by how tires will be received and introduced into the kiln has not yet been provided by Rinker.

Used Oil Halogen Limit

Rinker pointed out that the halogen limit could be increased from 1,000 to 4000 ppm if it can be shown that the higher value is not "as a result of the mixture of a hazardous waste." The Department indicated in the initial review that chlorides will be limited by practical considerations to meet cement specifications while wasting no cement kiln dust and "to control buildups of deposits on preheater and other surfaces." According to the literature, "in some specific instances, however, concentrations of approximately 0.1 percent (1000 ppm) by weight, were found at which that level could be of significance for the kiln operation." Also "increased chloride feed into the kiln reinforces the tendency to coating and ring formation."[23]

Increased chloride into the kiln, also increases both the potential for dioxin and hydrogen chloride formation. As pointed out in the technical evaluation "dioxin formation potential is minimized by the very high temperatures of combustion followed by low temperatures required for baghouse operation." However, no specific information or opinions have been provided by Rinker to corroborate the Department's assessment.

Flow Measurement

Rinker pointed out that use of "F factors" (an estimate of the volume of exhaust gas produced from fuel combustion) to calculate mass emission rates "is not appropriate" for cement plants "A significant fraction of carbon in the stack gas (as carbon dioxide) is present as a result of the calcining of limestone (rather than combustion of fuel)" The Department agrees with this assessment.

Tire Insecticide

Rinker stated that the tires will be received in enclosed vans and stored in these vans until they are fed into the tire feeding mechanism. "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."

In its initial evaluation, the Department agreed with Rinker. "Deleting the requirement, means that the insecticide will not contribute to formation of hydrogen chloride or dioxins and furans." Again, no actual details about the vans, any pretreatment, etc. were provided by Rinker.

VIII. RINKER RESPONSE

The Department's February 11, 1998 Intent provided Rinker with a period of 14 days to file for a petition following receipt of the Intent. It also provided 14 days following publication to receive comments related to the proposed permitting action. Rinker did not publish the required Public Notice or file for a petition or for an extension of the time to file a petition. Instead Rinker submitted comments approximately three weeks after issuance of the Intent.[24] The main comments were:

> *"In this particular case, there is no relocation and no modification that could be expected to cause new or greater environmental impacts. It is our opinion that none of the modifications to the permit are substantial enough to require a second Public Notice."*
>
> *"Our further reading of 40 CFR 60.50b, Applicability and Delegation of Authority exempts cement kilns firing municipal waste from the Subpart."*

Unsuccessful attempts were made by the Department to discuss the matters directly with Rinker's environmental representatives. Heretofore, neither the Department nor Rinker had been aware that Subpart Eb had exempted cement plants after issuance of the Department's original Intent. Instead, the Department was contacted by the consultant to discuss the issues.[25] The consultant was advised that Rinker should publish the Notice and that the Department would review Rinker's comments as well as any additional comments. The consultant stated he would take the recommendation "under advisement."

Because there appeared to be a misunderstanding, the Department rescinded the Intent and informed Rinker in writing that "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, 1997 request to revise the permit, but rather in the aforementioned response we received on March 4, 1998."[26]

The Department advised that "generally it (public notice) is required for anything but very minor corrections. It is also required to insure that changes in permit requirements like deletions of kiln exit temperature, are recognized by EPA. We will contact Rinker 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 solid waste rules and reporting requirements."

A letter was received shortly thereafter from Rinker's consultant.[27] It identified three main issues based on the mentioned contact from the consultant. These were described as:

> *The Department's "insistence on requiring public notice for this permit modification, regardless of the provisions of Chapter 62-103.150(2)(a)5., F.A.C."*
>
> *The 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 the total heat input to less than 3% of total heat input.*
>
> *The "reversal on the deletion of the kiln temperature requirement, which was deemed acceptable in (the Department's) Technical Evaluation and Preliminary Determination.*

The letter concludes that the (draft) permit modification is "more restrictive" than the existing permit and "offers little net benefit." The letter included what is in-effect an update of the revision application. The specific items requested are:

- Deletion of NSPS Subpart Eb from the list of applicable requirements in the original permit.
- Deletion of Specific Condition B.5(1)d. (limiting solid waste other than oil spill materials, sewage sludge, and tires to 10 megagrams per day) from the Department's draft modification.
- Revision of a paragraph in Specific Condition B.11 for consistency with Department rules.
- Deletion of Specific Condition B.20.B.(1)&(2) in the Department's draft modification related to recordkeeping and 40 CFR 60 Subpart Eb. Addition of an alternative recordkeeping and reporting Specific Condition.
- Renumber Specific Conditions as appropriate.
- Provide an Intent to Issue without a Public Notice requirement.

A detailed discussion as to why Rinker believes a public notice is not required was presented. Rinker's justification for the requested changes was provided.

A meeting to discuss the matter was held between Department, Dade County DERM (by telephone) and Rinker representatives, including Rinker's consultant. It was the expressed view of Rinker's representative that the issues were resolvable. He also indicated that the company did not want an updated revision to be issued soon (presumably if a public notice is required). He said that time was needed to discuss details with Dade County DERM about the processing of solid wastes. This was necessary because a waiver to the previously mentioned ordinance is apparently required to burn waste materials at the plant.

In discussions regarding Dade County's ordinance against disposal or recycling facilities in wellfields, the Department mentioned that sewage sludge appeared problematic. Additionally, the Department representatives mentioned that while burning sludge might be of some help in controlling NO_X, it could cause odor and would require additional fan capacity because of the water volume. Rinker responded that they do not want to burn sewage sludge and had planned to do so only at the request of Miami-Dade Water and Sewer Department.

IX DEPARTMENT INFORMATION REQUEST

The Department followed up the meeting with a letter basically stating its understanding of the issues, specifically requesting additional information, and advising that the application was incomplete. The request is reproduced here as follows:

1. References to the emission guideline applicable to municipal waste combustors will be removed because of the exemption of cement kilns from the regulation.
2. A Public Notice of Intent to Issue will be published by RMC. Objections from the public are limited to only the modifications of the permit, but not the construction of the project as presently permitted.
3. Dade County DERM, who attended the meeting by teleconference, has taken the position that their rules apply to the burning of solid waste materials by resource recycling and management facilities in wellfield protection areas. RMC will work directly with DERM to sort out those issues. In this regard, the addition of permit conditions regarding certain off-site generated wastes (e.g. oil spill wastes, oil filters) is subject to challenge by DERM or the public. Obviously some kind of agreement between DERM and RMC for burning the described wastes needs to be reached apart from this permitting action.
4. We requested a more precise description of where and how the various wastes will be introduced within the pyroprocessing operation and provided your (Rinker's) representatives with examples on how they should be presented.
5. It was agreed that sewage sludge will not be processed. Although there are some benefits to introducing this material into the process, there are some potential downsides. These include increased recirculations of various metals within the kiln, potential mild odors, and possible need for increased fan capacity.
6. It was pointed out by the Department that the permitted level of heat input from tires (40 percent) appears high. Our review of various references, reveals that the practical limit is approximately 25-30 percent as a maximum. Based on EPA and State of California documents on tire and tire-derived fuel burning as well as our discussions with industry experts, we suggest that 25 percent is a more reasonable and supportable limit. We therefore request your concurrence in lowering the heat input limit from tires accordingly. Please submit the total weight (tons/hr) of tires.
7. It was agreed that the kiln temperature requirement while burning tires will be deleted with the understanding that tires and tire derived fuel will not be introduced via the precalciner so that it may act somewhat as an afterburner. A protocol describing how and where tires will be introduced and the temperature needed for good combustion should be provided by RMC.

8. It was agreed that in any case, the amount of heat input from wastes that can be characterized as solid waste needs to be limited to less than 30 percent by weight rather than by heat input. This is to insure that the kiln cannot be characterized as a municipal waste combustor per Section 129 of the Clean Air Act. Please submit the total weight (ton/hr) of the plant's fuel stream.
9. Estimates of the expected amount of waste from each category need to be provided. For example, neither RMC nor the Department would actually expect a stream of 30 percent unused diapers to be burned in the kiln. We have supplied Koogler and Associates with examples of permit conditions for combusting similar segregated wastes at resource recovery facilities.
10. Regarding Comment No. 6 contained in the April 10 letter from Koogler and Associates, please provide the kiln's emission characteristics of a shutdown and malfunction and explain the type of malfunction that will be excluded from the daily average. Regarding this comment, the Department has previously negotiated this CEMs requirement with another cement plant and agreed to the condition as written in Rinker's permit. Please refer to the attached December 13, 1996 letter from RTP Environmental Associates Inc. Please be advised that Florida Crushed Stone is also permitted to construct a dry process cement kiln with preheater and precalciner.

The Department contacted Rinker to advise that it was actually required to take action soon on the permit modification because it was necessary to replace the rescinded draft in order to avoid a default of the "90 day clock."[28] Rinker advised that it did not want the Department to act yet and provided a letter extending the clock until August 14. Two subsequent extensions (to October 12 and November 30) were provided by Rinker at its convenience so that "Rinker and the Department can resolve any existing issues between them."[29] Upon expiration of the final request on November 30, the Department is required by the specific terms of the extension only to Issue an Intent rather than a final permit at this time.

A short meeting was held with Rinker's consultant in late September. It was emphasized that a response was required in order to act (by October 12) on the revision request and that the Department would act soon without the benefit of a response. His stated position was that the application was complete before the Department asked for the additional information. He did go over his position on some of the items. He stated that an agreement had been reached with Dade County DERM regarding the materials that can be burned. A copy of a proposed list of fuels to be fired was provided by Rinker's consultant to DERM who in-turn forwarded the list to the Department.[30] The forwarded fax from DERM included the comment:

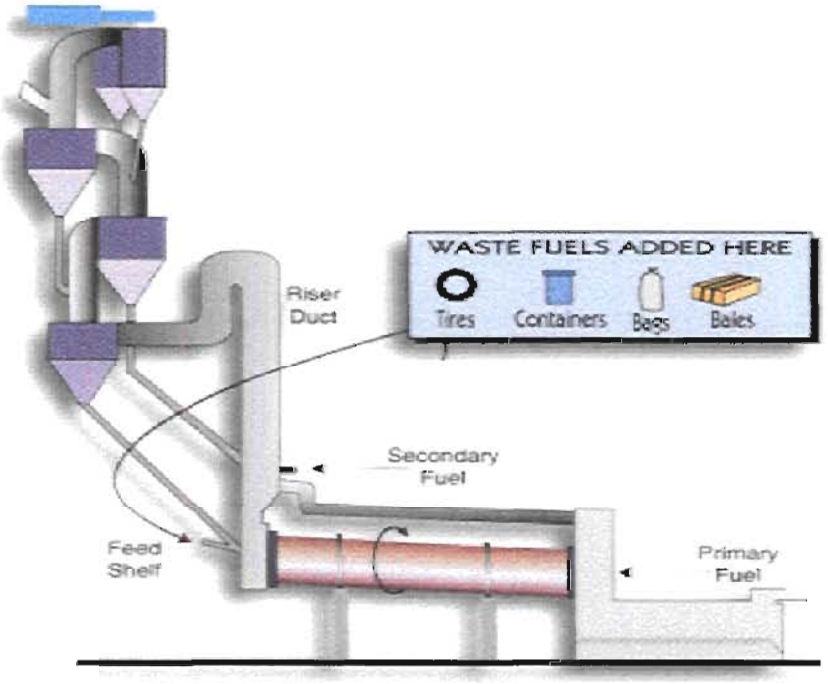
> *"Following is the fax from (Rinker's consultant)dated 9/21/98, which accurately reflects the changes language we agreed on with Rinker. Bear in mind that the Condition 2)(i)is explicit and limited to what non-hazardous industrial by-product materials may be burned as supplemental fuel."*[31]

Following receipt of the final waiver request (to November 30), the Department met with Rinker and its consultant to discuss the issues again.[32] It was again emphasized by the Department that the requested information was needed to process the application and that action would be taken soon rather than waiting until the most recent waiver expired.

Rinker's consultant presented a letter at the meeting in response to the Department's May 5 information request.[33] Following are Rinker's responses, dated October 26, 1998. These are paraphrased in some cases and numerically arranged per the 10 items in the Department's request:

1. - 3. Declaratory. No response necessary.

4. All solid supplemental material will be introduced in the vicinity of the feed shelf, as depicted in the drawing, *"A typical Precalciner Cement Kiln,"* included as Attachment 1.



5. Declaratory. No response necessary.

6. Rinker has reasonable assurance that tire-derived fuel could exceed 25 percent of the pyroprocessing system's heat input and approach 40 percent while meeting all applicable emission standards and producing acceptable clinker. Rinker claims that heat input has exceeded 45 percent during "practice compliance runs" on its existing wet process kilns. Rinker believes that other cement producers are constrained in heat input from tires for various reasons (including fuel and tire availability, raw materials, air flow, production parameters, etc.)

7. Tires and tire-derived fuel will be introduced in the vicinity of the feed shelf. This will allow the precalciner to act as an afterburner. The establishment of a temperature to replace the temperature requirement is of little practical value.

8. Rinker has reasonable assurance that the exemption from NSPS Subpart Eb, will ensure that the kiln cannot be characterized as a municipal waste combustor per Section 129 of the Clean Air Act (thus making it unnecessary to limit wastes to 30 percent by weight). Rinker mentioned that it is considering burning aspirin for its sugar (fuel) and calcium carbonate (raw material) content.

8. Rinker has reasonable assurance that the exemption from NSPS Subpart Eb, will ensure that the kiln cannot be characterized as a municipal waste combustor per Section 129 of the Clean Air Act (thus making it unnecessary to limit wastes to 30 percent by weight). Rinker mentioned that it is considering burning aspirin for its sugar (fuel) and calcium carbonate (raw material) content.
9. It is premature for Rinker to provide fuel stream makeup at this time. It is reasonable to expect that any of the permitted fuels will (be) burned in amounts approaching the permitted amounts (30 percent by heat input).
10. The kiln's emission characteristics during a shutdown will be similar to those characteristics during startup when no clinker is being produced. Rinker provided several examples of what types of malfunctions can occur with the air pollution control equipment.

Rinker advised that more details would be provided in terms of a matrix indicating the types of materials and amounts that might actually be combusted. The Department emphasized that its understanding all along had been that the amounts would be minimal and that only the unexpected exemption (effective after issuance of the original permit) presented a realistic possibility to combust substantial amounts of solid waste. While expanding the list of allowable supplemental fuels to include off-site generated oil spill materials, the Department believes that reasonable assurance needs to be provided that the higher quantities can be properly burned.

Given that additional information would be provided, the Department agreed to consider increasing the amount of solid waste burned (besides oil spill materials and tires) from the 10 megagrams per day (11 tons per day) proposed in the previous draft to 30 percent by heat input. Including tires this value is 40 percent or approximately 160 tons per day per Rinker's original application.

No additional information was provided by Rinker. The Department is acting based on the information received in the above response.

X. EVALUATION OF UPDATED REVISION REQUEST

Rinker has stated that it actually intends to burn 40 percent solid wastes including tires, oil filters, oil spill materials, paper, non-chlorinated plastics, unused diapers, and as-yet unspecified wastes (such as aspirin). Within the 40 percent, Rinker stated that it will actually burn the full 40 percent as tires and tire-derived fuel. Within the 40 percent Rinker stated in its October 26, 1998 letter (Item 9) that it might burn up to 30 percent (i.e. 3/4 of the allowable waste) as any single one of the supplementary materials identified.

As stated, the amount of waste is equal to 160 tons per day, which is well within the capacity of combustors that EPA intends to regulate by present and future rulemaking. In conversations with EPA, the Department was advised that cement kilns were dropped from Subpart Eb because the Portland Cement Association reported that none of its members burns more than 30 percent solid waste (by weight).[34] This allowed the final rule to be promulgated while EPA re-evaluates applicability to small (less than 250 TPD) combustors and eventually cement kilns. Actually the view expressed by the industry was that cement kilns do not burn municipal solid waste.

The Department contacted EPA regarding the test information collected in preparation of the proposed cement industry MACT Rule. The project officer could not cite a single example of any significant amounts of municipal solid wastes burned at cement kilns in the United States.[35]

The Department had previously relied extensively on statements by Rinker and its consultants regarding the ability to burn significant amounts of wastes in the proposed kiln. As a result of the lack of specific information regarding the amounts and the manner by which the various wastes will be burned, the Department conducted its own evaluation in determining whether reasonable assurance exists that such wastes can be properly handled by Rinker. Following is the updated assessment by the Department:

Tire Burning

The Department found no case of a cement kiln actually combusting more than 30 percent tires as fuel. Several cement kilns were found in California that had burned or tested tires and tire derived fuel. The tests ranged between 18 and 25 percent of the heat input to pyroprocessing.[36] Information from an EPA document listed tire burning at kilns in Florida, California, Oregon, Texas, South Carolina, Washington, Ohio, and Virginia. No kiln was tested while operating at more than 25 percent tires and tire derived fuel. According to tests at the Calaveras facility in California, low NO_X emissions (1.6 pounds per ton of clinker) were realized while firing tires.

The permit at the existing Rinker wet process cement facility allows use of up to 40 percent tires, but was tested only at 30 percent. The Department observed during a site visit that Rinker installed a system made by or similar to a "fork" system manufactured by Cadence.[37] The system looks like the following pictures from Cadence website:

The system observed by the Department engineer appeared to have an adequate delivery system (not shown above). So far no details have been provided regarding the system to be employed for the new kiln even though the kiln has reportedly been delivered to the site. To-date, Rinker has not acknowledged the manufacturer of the kiln or any details about the solid waste handling systems.

Notwithstanding the lack of information, the Department accepts that Rinker has sufficient experience burning tires to provide reasonable assurance that it will be properly done. The consultant described the mechanism adequately at an administrative hearing for the Florida Rock Cement Plant.[38]

Rinker demonstrated that it can achieve 30 percent tire burning in a kiln that has only one main burn point. Quite a large portion of the thermal load can be transferred to tire burning (at a mid-kiln location) in that configuration. Because there are two main burn points in the precalciner design and no tires will be burned in the precalciner or main burner, it is questionable whether 40 percent heat input will be achieved via the kiln feed shelf.

The Department will revise the condition to limit tire burning to 30 percent until Rinker provides a better understanding as to how much fuel can actually be provided via the feed shelf. By introducing tires only at the feed shelf, the Department believes that the precalciner will act as an afterburner. If 40 percent tires are introduced into the feed shelf, it is possible that very little fuel will be burned in the calciner and it may not actually act as an afterburner.

A more typical and recent example of tire burning at a modern kiln is at the Holnam Dundee, Michigan Plant. The Michigan Department of Environmental Quality issued a permit allowing the company to replace up to 21% of its fuel with Tire Derived Fuel (TDF) at its Dundee Township cement plant. This approval was the final step in the state's extensive permit review and approval process, which was begun by Holnam in August 1995.[39] For reference Holnam burns tires at 8 of its plants.

Kiln Exit Temperature

Given that the precalciner will act as an afterburner with a substantial thermal duty and that up to 30 percent tires will be introduced via the kiln shelf, the Department has reasonable assurance that combustion will be complete and that a temperature of 1750 ^{o}F will be attained in the area of the precalciner as presently required at the kiln outlet. The Department will not impose a new precalciner temperature requirement at 30 percent tires, but will reassess the need for a temperature limit if Rinker decides to burn more than 30 percent tires.

Used Oil Halogen Limit and Stack Gas Flow Measurement

Despite the relative lack of details, the Department will carry over its previous proposed approval regarding the on-spec used oil halogen limit and the deletion of insecticide use on tires. The "F factor" requirement is replaced with the flow rate monitor as proposed by Rinker.

Diapers, Plastics, Paper

Based on the responses from Rinker that "it is premature for Rinker to provide fuel stream makeup at this time" or the failure to describe any mechanisms for introducing the materials into the pyroprocessing system, the Department does not have reasonable assurance that it will be properly done when burning any more than a minimal amount. As mentioned, the Department found little if any information regarding combustion of these types of solid waste, let alone in the maximum amounts projected.

Until more details are provided, the Department will limit the amount to the de-minimus amount originally proposed by Subpart Eb at facilities located sites other than municipal waste combustors. This value is 10 megagrams per day.

Offsite Oil Spill Materials

The present permit does not allow burning of oil spill materials generated off-site. Until information is provided regarding how the material will be processed, the Department will maintain the present condition permitting only on-site generated oil spill materials.

Sewage Sludge

The Department will remove authorization to burn sewage sludge at the convenience of Rinker. More fan capacity is required due to the need to evaporate and move large amounts of moisture in addition to the normal combustion and calcination gases. Additionally there was no information provided in the original application regarding how sludge would actually be received, processed and burned. There are very few kilns burning sewage sludge. If Rinker wishes to burn sewage sludge, it will be added back to the waste fuel slate when more details are provided.

Other Wastes

Rinker provided no indication as to how other waste fuels/raw materials, such as aspirin will be received and processed. Additionally, Dade County DERM advised that no other wastes should be permitted. To the knowledge of the Department, Rinker does not have a waiver to the Dade County Ordinance prohibiting Resources Recovery and Recycling Facilities within Wellfield Protection Areas. The Department is expected by DERM to consider its ordinances when issuing state permits. As such, the Department is reluctant to expand the waste fuels slate without more details regarding what materials will actually be burned, how they will be received, transferred, processed, introduced into the kiln and safely burned.

XI. CONCLUSION

Rinker is approved to burn a greater variety and amount of solid wastes than any cement kiln in the state. Exemption of cement kilns from Subpart Eb presents an opportunity to actually burn up to 160 tons per day of waste fuels (excluding on-spec and off-spec used oil and petroleum coke) without providing details as to how it will be accomplished. As discussed in Section II above, the decision by the Department during the original permitting to not require a case-by-case MACT determination meant that various restrictions and emissions limits did not apply to Rinker.

The Department requires details and reasonable assurances before permitting amounts of wastes to be burned that are well in excess of what has been burned by Rinker historically. In the meantime, Rinker is still allowed to burn a more varied slate and greater amounts of waste fuels than any other cement kiln in the State.

A public notice is required for this permitting action. When further details are provided on Rinker's precise plans regarding additional amounts and types of wastes, a public notice will be required to revise the permit. This can be done concurrently with the public notice associated with issuance or revision of the Title V permit.

The proposed revisions to the permit specific conditions are shown in the draft modification letter attached to this evaluation.

References

[1] Final Determination. Rinker Modernization Project Permit. Florida Department of Environmental Protection. September 11, 1997.

[2] Proposed Rule. Environmental Protection Agency. Proposed Cement Industry MACT Rule. Federal Register..... March, 1998.

[3] Document. Koogler and Associates. Application to Construct/Modify Air Pollution Source - Rinker Materials Corporation, Miami Cement Plant. December 3, 1996. Page 6.

[4] Product Information. Fuller Company. Pyroprocessing and Standard Kiln Configurations.

[5] Document. Koogler and Associates. Report in Support of a Construction Permit Application December 3, 1996.

[6] Letter. Linero, A.A., FDEP to Jenkins, J.S., III, RMC. Application Incompleteness. December 31, 1996.

[7] Letter. Cullen, S.C., K&A, to Linero, A.A., FDEP. Response to Request for Additional Information of December 31, 1996. March 24, 1997..

[8] Letter. Linero, A.A., FDEP to Jenkins, J.S., III, RMC. Clarification on Proposed Solid Waste Materials. May 9, 1997.

[9] Letter. Cullen, S.C., K&A, to Linero, A.A., FDEP. Additional Information per Department Request. May 19, 1997.

[10] Report. Koogler and Associates. Summary of PM, SO_2, THC, CO, NO_X, Metals, and Benzene Emissions - Baseline and Coal/TDF Firing Conditions - Rinker Materials Corporation. January, 1993.

[11] Document. Florida DEP. Best Available Control Technology Determination - Florida Rock Industries. December, 1996

[12] Permit. Florida DEP. Air Construction Permit for Rinker Materials Corporation Miami Cement Plant. Permit No. 0250014-002-AC. September 11, 1997.

[13] Proposed Rule. 40 CFR 60, Subpart Eb, Standards of Performance for Municipal Waste Combustors for Which Construction is Commenced After September 20, 1994.

[14] Ordinance. Section 24-12.1(11). Dade County Code. Prohibition of Resources Recovery and Management Facilities Within Wellfield Protection Areas.

[15] Ordinance. Section 24-3(113). Dade County Code. Definition of Resource Recovery and Management facility.

[16] Meeting. Rinker, FDEP, Steele Hector Davis. Case-by case MACT Applicability. August 30, 1997.

[17] Letter. Koogler, J.B., P.E., K&A to Congden, W., Esq., FDEP. Motion for Extension of Time. September 26, 1997.

[18] Letter. Koogler, J.B., P.E., K&A to Fancy, C.H., FDEP. Comments on Construction Permit. September 26, 1997.

[19] Letter. Koogler, J.B., P.E., K&A to Congden, W., Esq., FDEP. Withdrawal of Extension of Time to Comment. October 23, 1997.

[20] Letter. Linero, A.A., FDEP to Jenkins, J.S., III, RMC. Re: Request for Revision of Air Permit. November 3, 1997.

[21] Document. Florida DEP. Technical Evaluation and Preliminary Determination. Rinker Draft Permit Modification. February 11, 1998.

[22] Telecon. Heron, T., and Linero, A.A., FDEP with Cullen, S., K&A. Matters Related to Rinker Request. Circa December 15, 1997.
[23] Book. Sprung, S., Forschunginstitut der Zementindustrie. Technical Problems in Pyroprocessing Cement Clinker: Cause and Solution. 129 pages.
[24] Letter. Koogler, J.B., K&A to Linero, A.A., FDEP. Comments on Draft Permit Modification, March 3, 1998.
[25] Telecon. Cullen, S., K&A and Linero, A.A., FDEP. Re: Public Notice Requirement and Applicability of Subpart Eb. April 7, 1998.
[26] Faxed Letter. Linero, A.A., FDEP to Jenkins, J.S., III, RMC. Revisions of Permit Conditions. April 10, 1998.
[27] Letter. Cullen, S.C., K&A, to Linero, A.A., FDEP. Written Comments Concerning Department's Proposed Action. April 10, 1998.
[28] Telecon. Linero, A.A., FDEP and Vardamen, M., RMC. Need for Department Action on Permit Modification. Circa May 25, 1998.
[29] Letters. Thomson, D.H., Esq., Berger Davis & Singerman. Waiver of 90-Day Time Period. June 3, August 12, and October 12, 1998.
[30] Fax. Cullen, S., K&A to Wong, P., DERM and Vardamen, M., RMC. Permit language for Rinker's New Plant. September 21, 1998.
[31] Fax. Wong, P., DERM to Linero, A.A., FDEP. Forward of and Comments on 9/21 Fax from K&A. October 26, 1998.
[32] Meeting. FDEP, Rinker, and K&A. Solid Waste and Public Notice Issues related to Revision of Construction Permit. October 27, 1998.
[33] Letter. Koogler, J.B., K&A to Linero, A.A., FDEP. Response to Department's May 5 Request. October 26, 1998.
[34] Telecon. Stephenson, W., EPA OAQPS with Linero, A.A., Kahn, J., and Hewett, M. of FDEP. Exclusion of Cement Kilns from Subpart Eb. October 27, 1998.
[35] Telecon. Wood J, EPA OAQPS with Linero, A.A., Kahn, J., and Heron, T. of FDEP. Test Data in Support of Cement Industry MACT. October 27, 1998.
[36] Document. California Integrated Waste Management Board. Tires as a Fuel Supplement: Feasibility Study - Report to the Legislature. January 1992. 98 pages.
[37] Site Visit. Linero, A.A., FDEP and Kunath, M.E., DERM. Rinker Wet Process Plant Visit. March, 1994.
[38] Hearing. Haile Community Association Versus Florida Rock Industries. Gainesville Florida. March 1996.
[39] Press Release. Holnam, Inc. "Holnam Dundee Plant Receives State Approval to Use Tires as Fuel." July 2, 1998.

January XX, 1999

CERTIFIED MAIL -RETURN RECEIPT REQUESTED

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

Re: Cement Plant Modernization Project
File No. 0250014-006-AC - Permit Revisions

Dear Mr. Jenkins:

The Department has reviewed your requests to revise certain specific conditions in the air construction permit for the Cement Plant Modernization Project as described in comments received by the Department between September, 1997 and October, 1998. The details of the Department's analysis were discussed in the Technical Evaluation and Preliminary determination distributed on November 30, 1998 with the Intent to Issue Air Construction Permit Modification. The permit is hereby modified as follows:

SPECIFIC CONDITION B.5 - FUEL COMBUSTION

B.5 ~~Fuel Combustion~~

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: Bituminous coal, natural gas, petroleum coke, propane, No. 2 fuel oil, residual fuel oil, on-specification and off-specification used oil and non hazardous solid waste materials as specified below. The receiving, storage, and handling of all allowable fuels shall be in accordance with all applicable federal, state and local regulations.

~~(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.~~

COAL AND PETROLEUM COKE

~~(2)~~(1) Unchanged

NON HAZARDOUS SOLID WASTE: Municipal Solid Waste and Solid Waste Materials

(2) Subject to the limitations contained in this permit, the following are the authorized solid waste materials allowed to be burned at this Kiln:

~~b. Whole tires and tire derived fuel (up to 40% heat input). This non-hazardous solid waste material shall may be used as a supplemental fuel, but not as a start-up fuel.~~

e.a. ~~Combustion of non-hazardous solid waste, oil filters,~~ Booms and rags from non hazardous petroleum spill clean up and oil filters generated on site. This non-hazardous solid waste materials ~~shall~~ may be used as supplemental fuel, but not as a start-up fuel. **[Rule 62-4.070(3), F.A.C.]**

d.b. ~~Combustion of non-hazardous solid waste (up to 30% of total heat input) may be used as supplemental fuel~~: Unused diapers, papers products, non-chlorinated plastic waste ~~(30% heat input)~~ (10 megagrams/day [11 tons/day]) ~~sewage sludge from publicly owned treatment works (POTW)~~. This non-hazardous municipal solid waste material ~~shall not be~~ may be used as supplemental fuel but not as a start-up fuel. **[Rule 62-4.070(3), F.A.C.]**

e.c. The combined percent heat input from these non hazardous solid wastes (described above in (2) a. and (2) b.), ~~and~~ tire-derived fuel, and tires (described in (3) below) ~~solid~~ waste shall not exceed 40 percent of the total heat input (kiln and precalciner heat input) from all fuels on a 24-hour basis. These fuels may be fed continuously at the kiln inlet at the base of the precalciner at a rate not to exceed 174.8 MMBtu/hr. **[Rule 62-4.070(3), F.A.C.]**

NON HAZARDOUS SOLID WASTE: Whole Tires and Tire-derived Fuel

(3) Whole tires and tire-derived fuel ~~along with the permitted non-hazardous s 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~~ 131.1 MMBtu/hr (~~40~~ 30% of total kiln and precalciner ~~fuel~~ heat input) on a 24-hour basis. Tires and tire-derived fuel may be used as a supplemental fuel, but not as a start-up fuel.

(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.~~

USED OIL

(5) 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 279.11 (July 1, 1996 version), 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 degrees F minimum
Polychlorinated Byphenyls (PCBs)	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).

SPECIFIC CONDITION B.11

The CEMS shall calculate and record emission rates in units of pounds of NO_X and SO_2 per hour. Clinker production rates shall be recorded daily. The permittee may establish a relationship between material feed rates and production rates of clinker if material feed rates are measured more accurately than clinker production rates and the relationship is accurate within 10%.

Every day, the 24-hour average NO_X and SO_2 emission rate for the previous day shall be calculated. Emissions shall be calculated in units of pounds per hour and pounds per ton of clinker. Daily averages are to be calculated as the arithmetic mean of each monitored operating hour. A monitored operating hour is each hour in which fuel is fired in the unit and at least two emission measurements are recorded at least 15 minutes apart. Data taken during periods of startup, or when fuel is not fired to the unit, or when the CEMS is not calibrated shall be excluded from the daily average.

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 provided that emissions are below the limits in Table 1-2. Emissions during start up, shutdown or malfunction which meet the requirements of 62-210.700 F.A.C shall not be included in the daily averages but shall be reported as excess emissions.

To the extent the monitoring system is available to record emissions data, the CEMS shall be operated and shall record data at all operating hours when fuel is fired in the unit, including periods of startup, shutdown, load change, continuous operation and malfunction.

Monitor downtimes and excess emissions based on daily averages, which include startup emissions, shall be reported on a quarterly basis using the SUMMARY REPORT in 40 CFR 60.7. A detailed report of the cause, duration, magnitude, and corrective action taken or preventative measures adopted for each excess emission occurrence, and a listing of monitor downtime occurrences shall accompany the SUMMARY REPORT when the total duration of excess emissions is 1% or greater or if the monitoring system downtime is 5% or greater of the total monitored operating hours.

~~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.

NEW SPECIFIC CONDITION B.23

In order to document compliance with the **Non Hazardous Solid Wastes** (municipal solid waste and solid waste) conditions in Specific Condition No. B.5(2) a. b. and c.

(1) Records of the amount of Municipal Solid Waste as described in Specific Condition B.5(2) b. shall be kept on a daily basis (ton/day). The amount of MSW burned at this kiln shall not exceed 10 megagrams/day (11 tons/day). **[Rule 62-4.070(3), F.A.C.]**

(2) Records of the amount of Solid Waste specified in Specific Condition B.5(2)a. shall be kept on a daily basis. **[Rule 62-4.070(3), F.A.C.]**

SPECIFIC CONDITION B.30

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.~~

SPECIFIC CONDITION B.36

The Permittee shall manage used oil generated or received at the facility and used oil filters generated at the facility in compliance with ~~Rule 62-710~~ Chapter 62-710, F.A.C. and 40 CFR 279.~~12~~. 10

A copy of this letter shall be filed with the referenced permit and shall become part of the permit. This permit modification is issued pursuant to Chapter 403, Florida Statutes. Any party to this order (permit modification) has the right to seek judicial review of it under Section 120.68, F.S., by the filing of 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 of Appeal must be filed within (thirty) days after this Notice 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 INTENT TO ISSUE AIR CONSTRUCTION PERMIT MODIFICATION (including the PUBLIC NOTICE, Technical Evaluation, and the DRAFT permit modification) was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on _____ to the person(s) listed:

James S. Jenkins, III, RMC *
Gregg Worley, EPA
John Bunyak, NPS
John Koogler, P.E.
H. Patrick Wong, DERM
Jose Gonzalez DERM
Isidore Goldman, SED

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)

Is your RETURN ADDRESS completed on the reverse side?

SENDER:
- Complete items 1, and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- 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.
- Write "*Return Receipt Requested*" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):
1. ☒ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
James Jenkins III
V.P. Cement Operations
Rinker Materials Corp.
1200 NW 137th Ave.
Miami, Fl. 33182

4a. Article Number
Z 333 612 563

4b. Service Type
☐ Registered ☑ Certified
☐ Express Mail ☐ Insured
☐ Return Receipt for Merchandise ☐ COD

7. Date of Delivery
12/2/98

5. Received By: (Print Name)
Allan Barenthin BARENTHIN

8. Addressee's Address (*Only if requested and fee is paid*)

6. Signature: (*Addressee or Agent*)
X

PS Form **3811**, December 1994 102595-97-B-0179 Domestic Return Receipt

Thank you for using Return Receipt Service.

Z 333 612 563

US Postal Service
Receipt for Certified Mail
No Insurance Coverage Provided.
Do not use for International Mail (*See reverse*)

Sent to James Jenkins	
Street & Number Rinker	
Post Office, State, & ZIP Code	
Postage	$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	$
Postmark or Date	11-30-98

PS Form **3800**, April 1995

Department of
Environmental Protection

Lawton Chiles
Governor

Virginia B. Wetherell
Secretary

November 30, 1998

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:

The Department received correspondence faxed to us by your consultant late in the afternoon on November 25, 1998. Because State offices were closed for the Thanksgiving Day Weekend, we did not see the comments until November 30. We were required to act on your request by November 30 based on a waiver to the statutory processing time provided by Rinker. Therefore we were unable to consider the comments by the time we had completed our review and submitted it for approval. Actually, we had expected additional information from Rinker well before this time as discussed during our meeting with your representatives on October 27.

We will consider these comments in addition to any other comments submitted by Rinker during the standard comment period as described in the Intent package we sent you mailed earlier today. If you have any questions regarding this matter, please contact me or Ms. Teresa Heron at 850/488-0114.

Sincerely,

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

AAL/aal

cc: John Koogler, P.E., K&A

Fold at line over top of envelope to the right of the return address

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- 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.
- Write "*Return Receipt Requested*" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
James J. Jenkins III
Rinker Materials Corp.
1200 NW 137th Ave
Miami, Fl 33182

4a. Article Number
Z 333 612 565

4b. Service Type
☐ Registered ☒ Certified
☐ Express Mail ☐ Insured
☐ Return Receipt for Merchandise ☐ COD

7. Date of Delivery
12/8/98

5. Received By: *(Print Name)*
SHARON COOMBS

8. Addressee's Address *(Only if requested and fee is paid)*

6. Signature: *(Addressee or Agent)*
X Sharon Coombs

PS Form **3811,** December 1994 102595-97-B-0179 Domestic Return Receipt

Is your RETURN ADDRESS completed on the reverse side?

Thank you for using Return Receipt Service.

Z 333 612 565

US Postal Service
Receipt for Certified Mail
No Insurance Coverage Provided.
Do not use for International Mail *(See reverse)*

Sent to James Jenkins	
Street & Number Rinker Materials	
Post Office, State, & ZIP Code Miami Fl	
Postage	$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	$
Postmark or Date 12-2-98	

PS Form **3800,** April 1995

025004-006-AC

INTEROFFICE MEMORANDUM

Date: 11-Aug-1998 02:51pm
From: Tom Conrardy TAL
CONRARDY_T
Dept: Waste Management
Tel No: 850/488-0190

To: See Below
Subject: Rinker Alternate Procedure Request

The following is an update of the Rinker alternate procedure request status.

Since I distributed the Rinker response to our comments to you in July, I discussed the site with Bill Neimes and he brought some aspects of their proposal that I had overlooked to my attention. Primarily, it appeared that they would only submit the Generator Certification "process knowledge" form for instances in which the normal pretreatment screening called for in Chapter 62-775 for petroleum contaminated soil shows some irregularity that raises suspicion. This is not consistent with what I had requested to Rinker in my previous letter. Bill and I called Geof Smith and discussed this problem with him. I informed him that since on contaminated soil from outside of a petroleum storage tank was deferred from RCRA regulation by EPA, they would need to do the form in every case that they wanted to accept and thermally treat soil-like materials from the sources described in their initial proposal, including tank bottom sludge, oil water separator sludge, car wash grit, etc. He said he would take this message back to Rinker. Geof Smith called me back today to tell me he is going to south Florida to discuss the issue with Rinker in a few days and he wants to know if that is the extent of our comments. Please respond to this message on whether any of you have any additional comments or whether you need more time for consideration of the issue. Also, FYI, Geof Smith included a statement in his letter that said something to the effect that the DEP should require that a similar form be used whenever landfills accept similar materials. I told him that if he was going to wait for us to agree to that before we issued the alternate procedure order, he would be waiting for quite awhile. He said that it was included more as a suggested policy statement and not as a proposed condition on the Department's side of approval of the alternate procedure order.

Thanks

Distribution:

To:	Satish Kastury TAL	(KASTURY_S)
To:	Bill Neimes TAL	(NEIMES_B)
To:	Richard Tedder TAL	(TEDDER_R)
To:	Michael Redig TAL	(REDIG_M)
To:	Chris McGuire TAL	(MCGUIRE_C)
To:	John M. Jones WPB	(JONES_JM @ A1 @ WPB1)
To:	Paul Wierzbicki WPB	(WIERZBICKI_P @ A1 @ WPB1)

DEP ROUTING AND TRANSMITTAL SLIP

TO: (NAME, OFFICE, LOCATION)

1. Joe Kahn
MS# 5505
2.
3.
4.
5.

PLEASE PREPARE REPLY FOR:

____ SECRETARY'S SIGNATURE

____ DIV/DIST DIR SIGNATURE

____ MY SIGNATURE

____ YOUR SIGNATURE

____ DUE DATE _____

ACTION/DISPOSITION

____ DISCUSS WITH ME

____ COMMENTS/ADVISE

____ REVIEW AND RETURN

____ SET UP MEETING

____ FOR YOUR INFORMATION

____ HANDLE APPROPRIATELY

____ INITIAL AND FORWARD

____ SHARE WITH STAFF

✓ FOR YOUR FILES

COMMENTS:

Information
on Rinker AP

FROM: R. Tedder DATE: 10/28/98 PHONE: 1-8115

DEP 15-026 (12/93)

INTEROFFICE MEMORANDUM

Date: 16-Sep-1998 03:48pm
From: Tom Conrardy TAL
CONRARDY_T
Dept: Waste Management
Tel No: 850/488-0190

To: See Below
Subject: Rinker Materials alternate procedure

There have been only a couple email or other feedback from staff of our 3 bureaus in the Division of Waste Management and district offices that have been involved with the RInker Altenate Procedure in response to my last memo dated 7/13/98 and followup email messages. I have to assume that everyone involved is satisfied with Rinker's proposal as amended by my email followup concerning "process knowledge". Therefore I have prepared a draft of an Alternative Procedure Approval Order for John Ruddell's signature. A copy of the draft order is attached. Please be advised that the following paragraph is included in the order which will be signed by John Ruddell to implicate the three bureau's in our division that have participated in this evaluation:

4. Because this request overlaps the regulatory authority of several different program areas, Department staff from the Bureau of Petroleum Storage Systems, the Bureau of Waste Cleanup, the Solid Waste Regulation Section, and the Hazardous Waste Regulation Section were consulted on this proposal, provided comments and recommendations during the Department's review, and agree with the findings and recommendations of this Alternative Procedure Order.

After I give you all another week or so to let me know if you have any comments or suggestions on the Order language, I will send a "DRAFT" copy to Rinker to verify that it is consistent with their proposal that has been amended a couple times. I also will tell Rinker they need to modify the "process knowledge" documentation form to indicate that in each case (source) they will obtain a copy of the form for their permanent files (unless of course they do hazardous waste characterization analysis of the material instead) and the site owner that provides "process knowledge" must certify that both it is contaminated with petroleum substances only, and that it is not characteristic hazardous waste.

Once this is approved I will be contacting Magnum Soil Thermal Treatment facility, which had originally submitted an almost identical request as Rinker, but did not attempt to follow through with the negotiation with the DEP that Rinker did. I will let them know what we are approving for Rinker and if they are willing to do the same thing we can approve an alternative procedure for them also. Also, Clark Environmental that recently received their 62-775 general permit also wants to thermally treat the same materials as Rinker but apparently they are willing to do haz waste characterization of each batch rather than rely on process knowledge. That one ought to be easier, but I think we should get Rinker out of the way first.

Let me know if you have any questions or concerns.

Thanks, Tom

Distribution:

To:	Bill Neimes TAL	(NEIMES_B)
To:	Tom Douglas TAL	(DOUGLAS_T)
To:	Satish Kastury TAL	(KASTURY_S)
To:	Michael Redig TAL	(REDIG_M)
To:	Douglas Outlaw TAL	(OUTLAW_D)
To:	Paul Wierzbicki WPB	(WIERZBICKI_P @ A1 @ WPB1)
To:	Chris McGuire TAL	(MCGUIRE_C)
To:	Richard Tedder TAL	(TEDDER_R)
To:	John M. Jones WPB	(JONES_JM @ A1 @ WPB1)
CC:	Mary Jean Yon TAL	(YON_MJ)
CC:	John Ruddell TAL	(RUDDELL_J)
CC:	Doug Jones TAL	(JONES_D)
CC:	Michael Sole TAL	(SOLE_M)
CC:	Beth Knauss TPA	(KNAUSS_B @ A1 @ TPA1)
CC:	Bill Hinkley TAL	(HINKLEY_B)
CC:	Guillermo Wibmer TAL	(WIBMER_G)

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL PROTECTION

IN RE: File No. AP-STTF0036

Rinker Materials Corporation)
Request Pursuant to Florida)
Administrative Code Rule 62-775.500)

DRAFT

APPROVAL OF ALTERNATIVE PROCEDURES

This cause comes before me upon receipt of a July 25, 1997 request by the original applicant, Koogler and Associates, on behalf of Rinker Materials Corporation, along with supplemental information prepared by Koogler and Associates and Blank, Rigsby and Meenan on behalf of Rinker Materials Corporation for the approval of an alternative procedure, pursuant to Rule 62-775.500 of the Florida Administrative Code ('F.A.C.'). The official request includes correspondence from Blank, Rigsby and Meenan representing Rinker Materials Corporation, including supplemental information dated July 2, 1998 in response to the Department of Environmental Protection ('Department')review comments. This alternative procedure request is to allow for the routine thermal treatment of materials other than the petroleum contaminated soil that has been excavated from the outside of a petroleum storage system; in particular, seven different categories of soil-like materials contaminated with petroleum products.

FINDINGS OF FACT

1. The applicant requests that exemptions be granted from Rule 62-775.100(4), F.A.C., and Rule 62-775.200(9), F.A.C. Rule 62-775.100(4), F.A.C., states that Chapter 62-775, F.A.C., applies only to the treatment of "petroleum contaminated soil" by thermal treatment facilities, and Rule 62-775.200(9), F.A.C., defines "petroleum contaminated soil."

2. Rinker Materials Corporation has identified six categories of petroleum contaminated materials that are soil-like in physical characteristics or may be readily blended with other

petroleum contaminated soil to produce a soil-like material suitable for thermal treatment. These materials are :

a.) sludges, and/or tank bottoms from petroleum product storage tanks,
b.) mineral-type sorbent materials that have been used for the cleanup of petroleum spills and/or leaks (e.g., kitty litter),
c.) oil/water separator residues,
d.) soakage pit residues,
e.) car wash reclaim water tank residues,
f.) storm water catch basin residues, and
g.) french drain residues.

3. Rinker Materials Corporation has asserted that thermal treatment is an effective means of treating any of the above materials to remove petroleum contamination from the materials and render the materials innocuous to public health and the environment and safe for disposal in an unregulated manner. For some of the materials which are by nature of a wetter consistency or would be expected to have a high concentration of petroleum product, Rinker Materials Corporation proposes that the material would be first blended with other petroleum contaminated soil in a ratio which would result in a blended material with physical characteristics suitable for effective and safe thermal treatment.

4. Because this request overlaps the regulatory authority of several different program areas, Department staff from the Bureau of Petroleum Storage Systems, the Bureau of Waste Cleanup, the Solid Waste Regulation Section, and the Hazardous Waste Regulation Section were consulted on this proposal, provided comments and recommendations during the Department's review, and agree with the findings and recommendations of this Alternative Procedure Order.

5. The Department's primary concern with this proposal was that these materials could be regulated hazardous wastes under the Resource Conservation and Recovery Act (RCRA) Program. "Petroleum contaminated soil" from outside of a petroleum storage system is specifically exempt from regulation under RCRA by deferral provisions contained in the RCRA regulations. This deferral and the definition of "petroleum contaminated soil" was the basis for establishing the authority for the Department to regulate the activities of thermal treatment facilities independently of RCRA program regulations. The materials listed in the alternative procedure request by Rinker Materials Corporation are not eligible for the deferment from RCRA applicability that was intended to apply to contaminated soil

associated with petroleum storage systems. The materials are potentially RCRA regulated hazardous wastes either by the nature of the activities that had been conducted at the source of the materials or by the characteristics of the materials (Toxicity Characteristic Leaching Procedure - TCLP). These materials could also potentially contain chemicals of concern other than those chemicals found in petroleum products, which might cause the materials to be outside the applicability of Chapter 62-775, F.A.C., and as such not suitable for thermal treatment under a Chapter 62-775, F.A.C., general permit. The Department had requested that assurance be provided to verify that the material from each source is not a RCRA regulated hazardous waste and that the materials are contaminated only with petroleum products.

6. In response to these concerns, Rinker Materials Corporation has proposed that a combination of recordkeeping of "process knowledge" and supplemental analysis of the soil prior to treatment be used to verify that the soil is only petroleum contaminated and also that it is not a hazardous waste. "Process knowledge" is information known by the generator of the material that the nature of the chemicals contained in the material are only derived from petroleum products and that the concentrations are well below the threshold to qualify as a hazardous waste by a TCLP analysis. In instances where process knowledge is not considered adequate, Rinker Materials Corporation will perform additional analytical characterization of the material to identify whether it is a hazardous waste and to determine whether it contains non-petroleum chemicals of concern.

7. The Department specifically requires the following be implemented for this proposal to be acceptable:

a.) Rinker Materials Corporation will use a consistent format for recording the process knowledge that is the basis to determine that the material is only petroleum contaminated and that it is not RCRA regulated due to concentration of chemicals of concern (TCLP for benzene).

b.) Rinker Materials Corporation will establish a supplemental filing system to maintain records of each source of non-soil material indicating a basis for acceptance of either process knowledge or supplemental characterization by soil analysis in addition to the analyses required by Chapter 62-775, F.A.C., for petroleum contaminated soil prior to thermal treatment. These supplemental records will be available upon request to Department staff during facility inspections.

c.) All sludges from inside of gasoline storage tanks and absorbent materials used to clean up a gasoline spill will be analyzed for TCLP for benzene rather than relying on process knowledge alone.

d.) Car wash reclaim water residues will only be from auto, light truck, and other passenger vehicle washes. Rinker Materials Corporation will not accept wash water residues from industrial or agricultural vehicle wash facilities.

e.) Rinker Materials Corporation will clarify with all generators of material that request thermal treatment that the purpose of the process knowledge certification is to provide assurance that only activities related to handling or storage of petroleum products have been conducted at the facility and only petroleum related chemicals of concern are likely contained in the material proposed for thermal treatment.

f.) Only mineral type sorbent materials will be thermally treated. Materials such as absorbent booms, paper, plastic materials or acrylic polymers used for absorbing petroleum products during spill cleanup will not be thermally treated.

g.) High-strength materials, such as petroleum tank bottom sludge, will always be blended with other petroleum contaminated soil to allow for proper and effective treatment in a safe manner. Blending will not be used for meeting the definition of non-hazardous materials.

8. The stationary soil thermal treatment facility for which this exception is sought is Rinker Materials Corporation, 1200 Northwest 137th Avenue, Miami, Florida, 33182. The Rinker Materials Corporation soil thermal treatment facility has been permitted by the Department to accept and treat petroleum contaminated soil and also soil with low concentrations (less than 10 ppm) of PCBs.

9. The applicant contends that this request satisfies the criteria for approval of an alternative procedure and requirement as set forth in Rule 62-775.500, F.A.C., and has provided sufficient information for the Department to determine that the alternative procedure will be at least as effective as the established procedure in that portion of the Florida Administrative Code specifically exempted by this Order.

The Department concludes that the process for screening and identifying waste materials to be thermally treated which has been proposed by Rinker Materials Corporation, and supplemented by conditions 7.a.) through 7.g.) above will provide for an

effective means of providing reasonable assurance to the Department that the facility will not treat materials which could be a hazardous waste under RCRA definitions and will only treat petroleum contaminated material under a Chapter 62-775, F.A.C., general permit.

CONCLUSIONS OF LAW

Florida Administrative Code Rule 62-775.500 authorizes the approval by the Secretary or the Secretary's designee of alternative procedures and requirements concerning the regulation of soil thermal treatment facilities.

The Department concludes that the applicant has adequately demonstrated that the proposed alternative procedure provides a substantially equivalent degree of protection for the lands, surface waters, and groundwaters of the State as the established requirements and that the alternative procedure is at least as effective as the established requirements.

Upon consideration of the foregoing it is therefore ORDERED that the request of Koogler and Associates and Blank, Rigsby and Meenan for an alternative procedure and requirement for the Rinker Materials Corporation thermal treatment facility located at 1200 Northwest 137th Avenue in Miami, Florida is GRANTED.

Persons affected by this Order have the following options:

If you choose to accept the above decision by the Department you do not have to do anything. This Order is final and effective as of the date on the top of the first page of this Order.

If you disagree with the decision, you may do one of the following:

1. File a petition for administrative hearing with the Department's Office of the General Counsel within 21 days after receipt of this Order;

OR

2. File a request for an extension of time to file a petition for hearing with the Department's Office of the General Counsel within 21 days after receipt of this Order. Such a request should be made if you wish to meet with the Department in an attempt to informally resolve any disputes without first filing a petition for hearing.

Please be advised that mediation of this decision pursuant to Section 120.573, Florida Statutes (F.S.), is not available.

How to Request an Extension of Time to File a Petition for Hearing

A request for an extension of time to file a petition for hearing must be filed (received) in the Department's Office of

the General Counsel at 3900 Commonwealth Boulevard, MS 35, Tallahassee, Florida 32399-3000, within 21 days after receipt of this Order. Pursuant to Rule 28-106.111(3), F.A.C., a request for extension of time shall contain a certificate that the moving party has consulted with all other parties, if any, concerning the extension and that the Department and any other parties agree to said extension. Petitioner, if different from Rinker Materials Corporation or Blank, Rigsby and Meenan shall mail a copy of the request to Rinker Materials Corporation and Blank, Rigsby and Meenan at the time of filing. Timely filing a request for an extension of time tolls the time period within which a petition for administrative hearing must be filed until the request is acted upon.

How to File a Petition for Administrative Hearing

A person whose substantial interests are affected by this Order may petition for administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed (received) in the Department's Office of the General Counsel at 3900 Commonwealth Boulevard, MS 35, Tallahassee, Florida 32399-3000, within 21 days after receipt of this Order. Petitioner, if different from Rinker Materials Corporation and Blank, Rigsby and Meenan, shall mail a copy of the petition to Rinker Materials Corporation and Blank, Rigsby and Meenan at the time of filing. Failure to file a petition within this time period shall waive the right of anyone who may request an administrative hearing under Sections 120.569 and 120.57, F.S.

Pursuant to Chapter 98-200, Laws of Florida, and Rule 28-106.201, F.A.C., a petition for administrative hearing shall contain the following information:

a) The name, address, and telephone number of each petitioner, the name, address, and telephone number of the petitioner's representative, if any, the site owner's name and address, if different from the petitioner, the FDEP facility number, and the name and address of the facility;
b) A statement of how and when each petitioner received notice of the Department's action or proposed action;
c) An explanation of how each petitioner's substantial interests are or will be affected by the Department's action or proposed action;
d) A statement of the material facts disputed by the petitioner, or a statement that there are no disputed facts;
e) A statement of the ultimate facts alleged, including a statement of the specific facts the petitioner contends

warrant reversal or modification of the Department's action or proposed action;

f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the Department's action or proposed action; and

g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the Department to take with respect to the Department's action or proposed action.

This Order is final and effective as of the date on the top of the first page of this Order. Timely filing a petition for administrative hearing postpones the date this Order takes effect until the Department issues either a final order pursuant to an administrative hearing or an Order Responding to Supplemental Information provided pursuant to meetings with the Department.

Judicial Review

Any party to this Order has the right to seek judicial review of this Order pursuant to Section 120.68, F.S., by filing a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Department clerk in the Office of the General Counsel, 3900 Commonwealth Boulevard, MS 35, Tallahassee, Florida 32399-3000. Simultaneously with filing a Notice of Appeal with the Department, petitioner must file a copy of the Notice of Appeal with the applicable filing fees, with the appropriate District Court of Appeal. The Notice of Appeal must be received by the Department clerk within 30 days from the date this Order was signed by the Department clerk (see below).

DONE AND ORDERED this _____ day of _____, 1998 in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION

_____

John M. Ruddell, Director
Division of Waste Management
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

May 5, 1998

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:

We received a letter dated April 10 from your consultant, Koogler and Associates, specifying the rationale for 11 issues or changes in the draft permit modification. We subsequently met with Mr. Steve Cullen, P.E., of Koogler and Associates and Mr. Mike Vardamen, representing Rinker Materials Corporation (RMC). Based on our review of the letter and our discussions at the meeting, we have the following comments and information requirements:

1. References to the emission guideline applicable to municipal waste combustors will be removed because of the exemption of cement kilns from the regulation.
2. A Public Notice of Intent to Issue will be published by RMC. Objections from the public are limited to only the modifications of the permit, but not the construction of the project as presently permitted.
3. Dade County DERM, who attended the meeting by teleconference, has taken the position that their rules apply to the burning of solid waste materials by resource recycling and management facilities in wellfield protection areas. RMC will work directly with DERM to sort out those issues. In this regard, the addition of permit conditions regarding certain off-site generated wastes (e.g. oil spill wastes, oil filters) is subject to challenge by DERM or the public. Obviously some kind of agreement between DERM and RMC for burning the described wastes needs to be reached apart from this permitting action.
4. We requested a more precise description of where and how the various wastes will be introduced within the pyroprocessing operation and provided your representatives with examples on how they should be presented.
5. It was agreed that sewage sludge will not be processed. Although there are some benefits to introducing this material into the process, there are some potential downsides. These include increased recirculations of various metals within the kiln, potential mild odors, and possible need for increased fan capacity.

P 265 659 345

no green card

US Postal Service

Receipt for Certified Mail

No Insurance Coverage Provided.

Do not use for International Mail *(See reverse)*

Sent to James Jenkins	
Street & Number Parker Materials	
Post Office, State, & ZIP Code Miami, Fl	
Postage	$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	$
Postmark or Date 025001 4-006-AC 5-6-98	

PS Form **3800**, April 1995

and

6. It was pointed out by the Department that the permitted level of heat input from tires (40 percent) appears high. Our review of various references, reveals that the practical limit is approximatley 25-30 percent as a maximum. Based on EPA and State of California documents on tire and tire-derived fuel burning as well as our discussions with industry experts, we suggest that 25 percent is a more reasonable and supportable limit. We therefore request your concurrence in lowering the heat input limit from tires accordingly. Please submit the total weight (tons/hr) of tires.

7. It was agreed that the kiln temperature requirement while burning tires will be deleted with the understanding that tires and tire derived fuel will not be introduced via the precalciner so that it may act somewhat as an afterburner. A protocol describing how and where tires will be introduced and the temperature needed for good combustion should be provided by RMC.

8. It was agreed that in any case, the amount of heat input from wastes that can be characterized as solid waste needs to be limited to less than 30 percent by weight rather than by heat input. This is to insure that the kiln cannot be characterized as a municipal waste combustor per Section 129 of the Clean Air Act. Please submit the total weight (ton/hr) of the plant's fuel stream.

9. Estimates of the expected amount of waste from each category need to be provided. For example, neither RMC nor the Department would actually expect a stream of 30 percent unused diapers to be burned in the kiln. We have supplied Koogler and Associates with examples of permit conditions for combusting similar segregated wastes at resource recovery facilities.

10. Regarding Comment No. 6 contained in the April 10 letter from Koogler and Associates, please provide the kiln's emission characteristics of a shutdown and malfunction and explain the type of malfunction that will be excluded from the daily average. Regarding this comment, the Department has previously negotiated this CEMs requirement with another cement plant and agreed to the condition as written in Rinker's permit. Please refer to the attached December 13,1996 letter from RTP Environmental Associates Inc. Please be advised that Florida Crushed Stone is also permitted to construct a dry process cement kiln with preheater and precalciner.

The application is incomplete per our discussion with your representatives. We understand that RMC will meet with DERM to resolve any outstanding local issues. If you have any questions regarding this matter, please contact Ms. Teresa Heron at (850)921-9529 or Mr. Joe Kahn at (850)921-9519.

Sincerely,

A. A. Linero 5/5

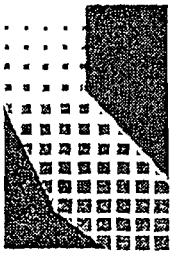
A. A. Linero, P.E. Administrator
New Source Review Section

AAL/aal

cc: Patrick Wong, DERM
Isadore Goldman, DEP
Bob Johns, DERM
Mike Vardeman, RMC
Steve Cullen, P.E., Koogler and Associates

Tires as a Fuel Supplement: Feasibility Study

Report to the Legislature
January 1992



California Integrated Waste Management Board

EPA-450/3-91-024

BURNING TIRES FOR FUEL AND TIRE PYROLYSIS: AIR IMPLICATIONS

CONTROL TECHNOLOGY CENTER

Sponsored by

Emission Standards Division
Office of Air Quality Planning and Standards
U.S. Environmental Protection Agency
Research Triangle Park, NC 27711

Air and Energy Engineering Research Laboratory
Office of Research and Development
U.S. Environmental Protection Agency
Research Triangle Park, NC 27711

December 1991

RTP ENVIRONMENTAL ASSOCIATES INC.®

AIR • WATER • SOLID WASTE CONSULTANTS

239 U.S. Highway 22 East
Green Brook, New Jersey 08812-1909

(908) 968-9600
Fax: (908) 968-9603

December 13, 1996

Mr. Clair H. Fancy, P.E.
Bureau of Air Regulation
Florida Dept. of Environmental Protection
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Dear Mr. Fancy:

We appreciate the Department's efforts in reviewing our application and preparing a draft permit. After careful review, Florida Crushed Stone (FCS) has the following comments on the draft air permit for a second kiln at their Brooksville facility:

(1) As noted in the application, FCS is requesting authority to construct either a gepol tower (previously permitted) or a precalciner kiln (subject of this draft permit). We request that the permit be worded to allow construction of either kiln to begin within 18 months of the effective date of this permit. This could be accomplished by a minor modification of the original permit (i.e., extending its date) or incorporating the original gepol tower permit into the new precalciner permit.

(2) The expiration date of this construction permit, November 30, 1998 (i.e., less than two years), is insufficient to allow for construction and shakedown of the proposed facility prior to applying for the operating permit. Therefore, we request that the expiration date be set at five years from the effective date of the final permit.

(3) Permit condition II.2.2(b) on page 5 is much more restrictive than requirements in the previous permit for the gepol tower kiln. Specifically, the applicant requests that the third through fifth bullet items be deleted. First, the permit application already specifies which materials will be stored in enclosed structures/silos. Also, determination of which materials required special storage was based on 10% moisture content in the previous permit application, not 14% as specified in the draft permit. Second, alignment of the coal pile with the predominant wind direction may not be possible given operational restrictions in the coal handling

area. Third, the requirement for revegetating haul roads and other disturbed areas is burdensome and may be interpretated to apply to mining operations. In summary, annual visible emission testing is being required as part of this permit for minor and fugitive PM sources, which will ensure that visible emissions are controlled to the degree necessary. Further, FCS maintains an ambient monitoring network that includes particulate monitoring as a further check on particulate emissions and impacts.

(4) Permit condition III.B11 on page 14 is much more restrictive than requirements in the previous permit for the gepol tower kiln. In the previous permit, production and feed rates were to be calculated and recorded daily, which is reflected in current condition III.B7. It is impractical, if not impossible, to calculate and record hourly production and feed rates. Even if it were somehow possible, the production and feed rates could not be calculated on a real-time basis for use by CEM systems.

Also, the requirement to calculate 24-hour rolling-hourly CEM averages is burdensome and not necessary. As written, we interprete the permit for the gepol tower kiln to require compliance with 24-hour limits to be based on daily block averages consistent with the requirement for production and feed rates to be recorded daily. Most existing permits with CEM requirements or new federal directives require that compliance with 24-hour permit limits based on CEM data be calculated as daily (i.e., block) rather than 24-hour running averages. For example, the recent Emission Guidelines/New Source Performance Standards (EG/NSPS) for municipal waste combustors (MWCs) at 40 CFR Subparts Cb and Eb require compliance based on CEM data to be determined with the daily (i.e., block) averaged geometric mean of hourly arithmetic mean concentrations, which are even less stringent than daily (i.e., block) averaged arithmetic mean averages.

Finally, this condition requires that startup be limited to 2 hours without notifying the Department. As noted in our May 10, 1995 responses for the previous permit, startup from cold conditions can take up to 24 hours (a large amount of time is necessary to heat the large thermal mass of the kiln). Thus, every cold startup would require notification and potentially prior Department approval. We believe that the language in the draft permit is a misinterpretation of FAC 62-210.700, which limits the duration of excess emissions due to startup, shutdown, and malfunctions to two hours in a 24 hour period. During startup and shutdown, emissions will be less than permit limits given in lb/hour values. However, since no feed stock is introduced or clinker produced during the initial warmup phases of a startup, permit limits given in lb/ton are meaningless. We suggest that this condition be reworded as follows:

(6) On Table 2-1, please change the required test method for beryllium to Method 29 from Method 104. Thus, compliance with the beryllium emission limit can be determined during the same multi-metals test as required for mercury and lead in order to simplify the initial stack tests procedures and minimize testing costs.

(7) Permit condition III.C5 on pages 20 and 21 notes that Department establishes a visible emission limitation of 5% opacity in lieu of particulate stack tests. Like specific condition 13 in the gepol tower permit, it should be explicitely stated that visible emissions in excess of 5% opacity are not permit violations, but only require that particulate stack tests be performed.

(8) Permit condition III.C10(c) on pages 21 and 22 specifies an opacity limit for coal handling equipment and fugitive emissions from coal storage piles, etc. to less than 5% except when adding, moving, or removing coal (during which opacity shall be no more than 20%). To maintain consistency with opacity limits for other fugitive emissions, FCS requests that the "less than 5% opacity" be changed to "10% opacity or less" and revise the entry in the opacity column of Table 1-1 for coal handling and storage fugitive emissions accordingly (i.e., from "5/20/10" to "20/10").

If you have any questions or need any additional information, please feel free to contact either Bryan Adkins of Florida Crushed Stone at 352-799-7881 or myself at 908-968-9600.

Sincerely,

RTP ENVIRONMENTAL ASSOCIATES, INC.®

Donald F. Elias/wec

Donald F. Elias
Principal

DFE/WEC/wec

cc: A. Linero, T. Heron, C. Holladay, H. Oven/FDEP
B. Adkins, C. Allen/FCS
L. Curtin, Esq./Holland & Knight
M. Hober, W. Corbin, M. Lewis, FCS3 Project File/RTP

EPA
NPS
SWD
Beason, OGC
L. Jennings, Hernando Co.

METROPOLITAN DADE COUNTY, FLORIDA

METRODADE

DERM

ENVIRONMENTAL RESOURCES MANAGEMENT
AIR QUALITY MANAGEMENT DIVISION
SUITE 900
33 S.W. 2nd AVENUE
MIAMI, FLORIDA 33130-1540
(305) 372-6925

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

April 10, 1998

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

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. Hewx, BAR
J. Kahn, BAR
EPA
NPS
Dade Co.
SED

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

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.

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.

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 279.1~~0~~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.

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

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

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".

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.

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 themaximum 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

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 (O_3) 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 (SO_2), +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 (PM_{10}), +57.6 TPY of carbon monoxide (CO), +32.9 TPY of volatile organic compounds (VOC), and -13.4 TPY of sulfuric acid mist (SO_3). Slight reductions or insignificant increases are also expected in emissions of lead (Pb), mercury (Hg), and beryllium (Be).

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.

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.

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.

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

Virginia B. Wetherell
Secretary

April 10, 1998

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.

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.

[redacted]

SENDER:
- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- 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.
- Write *"Return Receipt Requested"* on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):
1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

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

4a. Article Number
P 265 659 331

4b. Service Type
☐ Registered ☑ Certified
☐ Express Mail ☐ Insured
☐ Return Receipt for Merchandise ☐ COD

7. Date of Delivery
4/15

5. Received By: *(Print Name)*

6. Signature: *(Addressee or Agent)*
X [signature]

8. Addressee's Address *(Only if requested and fee is paid)*

PS Form **3811**, December 1994 Domestic Return Receipt

Is your RETURN ADDRESS completed on the reverse side?

Thank you for using Return Receipt Service.

P 265 659 331

US Postal Service
Receipt for Certified Mail
No Insurance Coverage Provided.
Do not use for International Mail *(See reverse)*

Sent to James Jenkins	
Street & Number Rinker Materials	
Post Office, State, & ZIP Code Miami Fl	
Postage	$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	$
Postmark or Date 4-13-98	

0250014-006AC

PS Form **3800**, April 1995

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

KA 263-94-04

March 3, 1998

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

Subject: Rinker Materials Corporation
Dade County, Florida
Comments on Draft Permit Modification
No. 0250014-006-AC
Modernization Project, Revisions of
Permit Conditions

Dear Al:

We have had the opportunity to review the draft permit modification for the Rinker Material Corporation (Rinker) Portland cement plant modernization project forwarded to Rinker under cover of your letter dated February 11, 1998. We appreciate the cooperation and effort of you and Teresa Heron in working with us to develop this permit and to draft these permit modifications in response to our earlier comments. We have a couple of questions regarding the most recent modifications. The questions and comments address:

1. the necessity of a second Public Notice,

2. the need to incorporate permit limits addressing the requirements of 40 CFR 60.51b, Subpart Eb (Municipal Waste Combusters),

3. compliance monitoring, and

4. minor editorial comments.

1. Necessity of Second Public Notice

Our first question and comments are related to the necessity of a second Public Notice. It is our opinion that none of the modifications requested and made in the subject permit are substantial enough to warrant a second Public Notice. None of the modifications substantially relax any permit condition nor do they allow for an increase in the emissions of any permitted air pollutant or result in the emissions of air pollutants not previously addressed. As stated in the Department's proposed second Public Notice, the permit revisions are limited to:

1. the handling of tires (the operating temperatures at which tires can be introduced into the kiln and the necessity of spraying the tires with an insecticide prior to receipt at the facility),

2. clarification that non-hazardous wastes used as fuel can be received from off-site sources as well as being generated on-site,

3. clarification of the halogen concentration limits in used oil,

4. clarification of the compliance calculation procedures, and

5. limits on the amount of non-hazardous solid wastes which may be combusted.

The necessity of the limit on the amount of non-hazardous solid waste is addressed in a separate section of this letter. As stated previously, it is our opinion that none of the modifications to the permit are substantial enough to require a second Public Notice.

The requirement for a Public Notice of an Intent to Issue an air construction permit is set forth in Chapter 403.815, F.S and Rule 62-103.150, F.A.C. Rule 62-103.150 (2)(a)1, F.A.C. states:

> The Department shall require publication of Notice of the Department's proposed action on an application in the following circumstances:
>
> > All applicants for construction permits for ... air pollution sources shall publish ... a Notice of Intent to Issue a Permit.

Further on (62-103.500(2)(a)5, F.A.C.), the rule states:

> After publication of the Notice of Intent to Issue ... 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 modifications.... For purposes of this subparagraph, the term "substantial modification" means a major relocation or modification of the activity or project that is reasonably expected to cause new or greater adverse environmental impacts on the substantial interests of a person other than the application [Emphasis added].

In this particular case, there is no relocation and no modification that could be expected to cause new or greater environmental impacts.

Based upon the referenced statute and rule and the extent of the modifications to the Rinker permit, it is our opinion that a second Public Notice is not necessary. I would appreciate your consideration of this matter.

2. Necessity of Limiting Non-hazardous Solid Waste Combustion to Comply with 40 CFR 60.15b, Subpart Eb

As stated in the Technical Evaluation and Preliminary Determination, the Department added new Specific Condition B.5(1)d to clarify the Department's intent regarding the burning of municipal solid waste and to address the requirements of NSPS, Subpart Eb, 40 CFR 60. Our further reading of 40 CFR 60.50b, Applicability and Delegation of Authority (at 40 CFR 60.50b.p.), exempts cement kilns firing municipal solid waste from the Subpart. This being the case, it is suggested that new Specific Condition B.5(1)b be reworded:

> Combustion of the following materials which are non-hazardous municipal waste may be used as supplemental fuel: unused diapers, paper products and non-chlorinated plastic waste. These non-hazardous wastes raw materials shall not be used as start-up fuel.

The heat input provided by these materials is adequately limited by proposed Specific Condition B.5(1)e.

3. Compliance Monitoring Requirements

The requirements in the third paragraph of Specific Condition B.11 are inconsistent with Department rules. The condition specifically states:

> However, emissions during start-up 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. [Emphasis added]

This condition is in conflict with Department rule 62-210.700, F.A.C. which is included as Common Specific Condition (CSC) 3.4 of the permit. The Department rule and CSC 3.4 authorize excess emissions during start-up, shutdown or malfunction provided, among other conditions, best operating practices are adhered to.

Based upon Department rule, it is requested that the third paragraph of Specific Condition B.11 be worded:

> For compliance with the emission limits in Table 1-2, the daily average shall not include data from periods of start-up when no clinker is being produced. Also, emission data from periods 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.

4. Editorial Comments

Specific Condition B.20.B(1)

To be consistent with our suggested change regarding 40 CFR 60, Subpart Eb, it is suggested that this specific condition be worded:

> Record keeping on burning non-hazardous municipal solid waste shall include records of the amount of municipal solid waste fired on a daily basis.

Specific Condition B.36

In the February 11, 1998, draft, this specific condition is referred to as Specific Condition B.35. The correct reference should be Specific Condition B.36.

We appreciate the opportunity to comment on the draft permit and appreciate your consideration of our comments. If you have any questions regarding these comments, please do not hesitate to contact me or Steve Cullen at 352-377-5822.

Very truly yours,

KOOGLER & ASSOCIATES

John B. Koogler, Ph.D., P.E.

JBK:wa

c: Mr. Mike Vardeman, Rinker

cc: T. Heron
C. Holladay
Dade Co.
SED
EPA
NPS

KOOGLER & ASSOCIATES
ENVIRONMENTAL SERVICES

Memorandum

Florida Department of
Environmental Protection

TO: Clair Fancy

THRU: Al Linero aal 2/5

FROM: Teresa Heron T.H

DATE: February 4, 1998

SUBJECT: Rinker Materials Corporation, 0250014-006-AC
Draft Modification of Reconstruction Permit

Attached is a construction permit modification for this facility. This permit modification addresses comments that Rinker submitted after they received a final permit for reconstruction and modernization of the facility. Though the consultant considers them to be "administrative changes," we consider them significant enough to require submittal of an application and publication of a new public notice.

The changes primarily pertain to details about non-hazardous solid waste generated or received on-site such as unused diapers, paper products, non-chlorinated plastic waste, and POTW sewage sludge that they are already permitted to burn. We made changes including specification of halogen content in used oil, conditions regarding tire handling, and deletion of kiln exit temperature limits. The latter can be deleted because the precalciner (not present in certain designs) acts much as an afterburner.

It was necessary to include a limit on the amount of municipal solid waste they can burn to a 11 TPD so they are not subject to 40CFR60, Subpart Eb.

I recommend your approval and signature

AAL/aal

In the Matter of an
Application for Permit Modification by:

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

DEP File No. 0250014-006-AC
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 permit revisions, detailed in the application specified above, for the reasons stated below.

The applicant, Rinker Materials Corporation (RMC), applied on September 30, 1997 to the Department of Environmental Protection for modification of certain conditions in its air construction permit related to use of solid waste, tires, and used oil as fuels at the planned cement plant reconstruction project located at 1200 NW 137th Avenue in Miami, Dade County.

The Department has permitting jurisdiction under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, and 62-212. The above actions are not exempt from permitting procedures. The Department has determined that a permit modification is required to revise the conditions of the approved air construction permit for the reconstruction project at the described facility.

The Department intends to issue this air construction permit modification based on the belief that reasonable assurances have been provided 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, 62-296, and 62-297, F.A.C.

Pursuant to Section 403.815, F.S., and Rule 62-103.150, 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 one time only within 30 (thirty) days in the legal advertisement section of a newspaper of general circulation in the area affected. 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. Where there is more than one newspaper of general circulation in the county, the newspaper used must be one with significant circulation in the area that may be affected by the permit modification. 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: 904/488-1344; Fax 904/ 922-6979) within 7 (seven) days of publication. Failure to publish the notice and provide proof of publication within the allotted time may result in the denial of the permit modification pursuant to Rule 62-103.150 (6), F.A.C.

The Department will issue the FINAL Permit Modification, in accordance with the conditions of the enclosed DRAFT Permit Modification 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 DRAFT Permit Modification issuance action for a period of 14 (fourteen) 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, 2600 Blair Stone Road, Mail Station #5505, Tallahassee, Florida 32399-2400. Any written comments filed shall be made available for public inspection.

NOTICE TO BE PUBLISHED IN THE NEWSPAPER

The Department will issue FINAL Permit Modification with the conditions of the DRAFT Permit Modification unless a timely petition for an administrative hearing is filed pursuant to Sections 120.569 and 120.57 F.S. Mediation is not available for this action.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57 F.S. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000, telephone: 904/488-9370, fax: 904/487-4938. Petitions 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. A petitioner must 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 28-5.207 of the Florida Administrative Code.

A petition must contain the following information: (a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Permit File Number and the county in which the project is proposed; (b) A statement of how and when each petitioner received notice of the Department's action or proposed action; (c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action; (d) A statement of the material facts disputed by petitioner, if any; (e) A statement of the facts that the petitioner contends warrant reversal or modification of the Department's action or proposed action; (f) A statement identifying the rules or statutes that the petitioner contends require reversal or modification of the Department's action or proposed action; and (g) A statement of the relief sought by the petitioner, stating precisely the action that the petitioner wants the Department to take with respect to the Department's action or proposed action addressed in this notice of intent.

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 of intent. 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:

Department of Environmental Protection
Bureau of Air Regulation
111 S. Magnolia Drive, Suite 4
Tallahassee, Florida, 32301
Telephone: 904/488-1344
Fax: 904/922-6979

Dade County Department of
Environmental Resources Mgmt
33 SW Second Avenue, Suite 900
Miami, Florida 33130-1540
Telephone: 305/372-6925
Fax: 305/372-6954

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

The complete project file includes the original permit file, Draft Permit Modification, the application, 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 904/488-1344, for additional information.

If written comments received result in a significant change in this DRAFT Permit Modification, the Department shall issue a Revised DRAFT 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. Mediation is not available for this action.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57 F.S. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000, telephone: 904/488-9730, fax: 904/487-4938. Petitions must be filed within 14 (fourteen) days of publication of the public notice or within 14 (fourteen) days of receipt of this notice of intent, whichever occurs first. A petitioner must 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 28-5.207 of the Florida Administrative Code.

A petition must contain the following information: (a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Permit File Number and the county in which the project is proposed; (b) A statement of how and when each petitioner received notice of the Department's action or proposed action; (c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action; (d) A statement of the material facts disputed by petitioner, if any; (e) A statement of the facts that the petitioner contends warrant reversal or modification of the Department's action or proposed action; (f) A statement identifying the rules or statutes that the petitioner contends require reversal or modification of the Department's action or proposed action; and (g) A statement of the relief sought by the petitioner, stating precisely the action that the petitioner wants the Department to take with respect to the action or proposed action addressed in this notice of intent.

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 of intent. 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. 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.

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, and the DRAFT Permit Modification) was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on 2-12-98 to the person(s) listed:

James S. Jenkins, III, RMC *
Brian Beals, EPA
John Bunyak, NPS
John Koogler, P.E.
Ewart L. Anderson, DERM
Isidore Goldman, SED

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to §120.52(7), Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

(Clerk) 2-12-98 (Date)

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

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 (O_3) 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 (SO_2), +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 (PM_{10}), +57.6 TPY of carbon monoxide (CO), +32.9 TPY of volatile organic compounds (VOC), and -13.4 TPY of sulfuric acid mist (SO_3). Slight reductions or insignificant increases are also expected in emissions of lead (Pb), mercury (Hg), and beryllium (Be).

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.

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.

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.

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.

DRAFT

March XX, 1998

CERTIFIED MAIL -RETURN RECEIPT REQUESTED

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

Re: Cement Plant Modernization Project
File No. 0250014-006-AC - Permit Revisions

Dear Mr. Jenkins:

The Department has reviewed your request to revise certain specific conditions in the air construction permit for the Cement Plant Modernization Project as described in comments received by the Department on September 30, 1997 and a subsequent permit modification application received on November 12. The requests are related to the already-approved burning of solid waste and used oil, tire handling, and kiln operation. The details of the Department's analysis were discussed in the Technical Evaluation and Preliminary determination distributed with the Intent to Issue Air Construction Permit Modification. The permit is hereby modified as follows:

SPECIFIC CONDITION 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. & b. are unchanged.

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

~~d. Combustion of non-hazardous solid waste (up to 30% 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.~~

d. Combustion of the following materials which are non-hazardous municipal solid waste (as defined in 40 CFR 60.51b. Subpart Eb) may be used as supplemental fuel: unused diapers, paper products, non-chlorinated plastic waste. The maximum amount of these wastes or materials that may be combusted shall not exceed 10 megagrams per day (900 pounds per hour). These non-hazardous wastes or materials shall be not be used as start-up fuel.

e. The combined percent heat input from ~~tires, tire-derived fuel, and solid waste~~ fuels described in b., c., and d. above shall not exceed 40 percent of the total heat input (174.8 MMBtu/hr) from all fuels on a 24-hour basis.

(2) Unchanged

(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~~ heat 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.~~

(5) 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 version), 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 degrees F minimum
Polychlorinated Byphenyls (PCBs)	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).

SPECIFIC CONDITION B.11

The CEMS shall calculate and record emission rates in units of pounds of NO_X and SO_2 per hour. Clinker production rates shall be recorded daily. The permittee may establish a relationship between material feed rates and production rates of clinker if material feed rates are measured more accurately than clinker production rates and the relationship is accurate within 10%.

Every day, the 24-hour average NO_X and SO_2 emission rate for the previous day shall be calculated. Emissions shall be calculated in units of pounds per hour and pounds per ton of clinker. Daily averages are to be calculated as the arithmetic mean of each monitored operating hour. A monitored operating hour is each hour in which fuel is fired in the unit and at least two emission measurements are recorded at least 15

15 minutes apart. Data taken during periods of startup, or when fuel is not fired to the unit, or when the CEMS is not calibrated shall be excluded from the daily average.

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 the extent the monitoring system is available to record emissions data, the CEMS shall be operated and shall record data at all operating hours when fuel is fired in the unit, including periods of startup, shutdown, load change, continuous operation and malfunction.

Monitor downtimes and excess emissions based on daily averages, which include startup emissions, shall be reported on a quarterly basis using the SUMMARY REPORT in 40 CFR 60.7. A detailed report of the cause, duration, magnitude, and corrective action taken or preventative measures adopted for each excess emission occurrence, and a listing of monitor downtime occurrences shall accompany the SUMMARY REPORT when the total duration of excess emissions is 1% or greater or if the monitoring system downtime is 5% or greater of the total monitored operating hours.

~~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.

SPECIFIC CONDITION B.20

A. In order to document compliance with Specific Condition No. B5(3) **Tires:**

(1) - (5) Unchanged.

B. In order to document compliance with the non-hazardous solid and municipal solid wastes conditions in Specific Condition No. B5(1) c., d., and e.:

(1) Recordkeeping when burning non-hazardous municipal solid waste shall be in compliance with NSPS, 40 CFR 60 .50b (b), Subpart Eb and Specific Condition No. B.5 (1) e. Records of the amount of municipal solid waste fired shall be kept on a daily basis.

(2) Recordkeeping when burning the solid waste specified in Specific Condition B.5(1) c shall be in compliance with Specific Condition No. B.5. (1) e. Records of the amount of solid waste fired shall be kept on a daily basis.

SPECIFIC CONDITION B.30

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.~~

DRAFT

SPECIFIC CONDITION B.35

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

A copy of this letter shall be attached to and be a part of Permit 0250014-002-AC.

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 INTENT TO ISSUE AIR CONSTRUCTION PERMIT MODIFICATION (including the PUBLIC NOTICE, and the DRAFT permit modification) was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on _____ to the person(s) listed:

James S. Jenkins, III, RMC *
Brian Beals, EPA
John Bunyak, NPS
John Koogler, P.E.
Ewart L. Anderson, DERM
Isidore Goldman, SED

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to §120.52(7), Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

_____ _____
(Clerk) (Date)

Is your RETURN ADDRESS completed on the reverse side?

SENDER:
- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- 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.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):
1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
James S. Jenkins III
Rinker Materials
1200 NW 137th Ave
Miami, Fl 33182

4a. Article Number P 265 659 292

4b. Service Type
☐ Registered ☒ Certified
☐ Express Mail ☐ Insured
☐ Return Receipt for Merchandise ☐ COD

7. Date of Delivery 2/19/98

5. Received By: (Print Name)

8. Addressee's Address (Only if requested and fee is paid)

6. Signature: (Addressee or Agent)
X

PS Form **3811**, December 1994 Domestic Return Receipt

Thank you for using Return Receipt Service.

P 265 659 292

US Postal Service
Receipt for Certified Mail
No Insurance Coverage Provided.
Do not use for International Mail (See reverse)

Sent to James Jenkins
Street & Number Rinker Materials
Post Office, State, & ZIP Code Miami Fl

Postage	$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	$
Postmark or Date 0250014-006-AC 2-12-98	

PS Form **3800**, April 1995

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

KA 263-94-04

November 10, 1997

Mr. A. Linero, P.E.
Florida Department of
Environmental Protection
2600 Blair Stone Road
Tallahassee Fl 32399-2400

Subject: Request for Revision
Rinker Materials Corporation
Permit No. 0250014-002-AC 0250014-006-AC

Dear Mr. Linero:

In response to your letter dated November 3, 1997, to Mr. James Jenkins III, Rinker Materials, enclosed is a check for $250 (processing fee).

Very truly yours,

KOOGLER & ASSOCIATES

John B. Koogler

John B. Koogler, Ph.D., P.E.

JBK:wa
Enc.

c: Mr. Mike Vardeman, Rinker Materials

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JOHN B. KOOGLER, P.A.
DBA KOOGLER & ASSOCIATES
4014 N.W. 13TH ST., 352-377-5822
GAINESVILLE, FL 32609

63-2
00

11/10 1997

PAY TO THE ORDER OF Florida Department of Environmental Protection $ 250.00

Two Hundred and Fifty and 00/100 DOLLARS

FIRST UNION
First Union National Bank of Florida
Gainesville, Florida
24 Hour Information Service
1-800-735-1012

FOR Rinker Materials Corp - permit Revision

[redacted]

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GUARDIAN ® SAFETY

Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

November 3, 1997

CERTIFIED MAIL-RETURN RECEIPT REQUESTED

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

11/18/97
0250014-006-AC

RE: Request for Revision of Air Permit No. 0250014-002-AC
Rinker Materials Corporation, Miami Cement Plant

Dear Mr. Jenkins:

The Bureau of Air Regulation received your request for a revision to the above referenced permit. Before we can begin processing your request, we will need a processing fee of $250 pursuant to Rule 62-4.050(4)(r)5, F.A.C. If you have any questions, please call Teresa Heron at (850)488-1344.

Sincerely,

A. A. Linero, P.E.
Administrator
New Source Review Section
Bureau of Air Regulation

AAL/kt

cc: T. Heron, BAR

Fold at line over top of envelope to the right of the return address

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
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I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
James S. Jenkins III.
V.P. of Cement Operations
Rinker Materials Inc.
1200 NW 137th Ave
Miami, Fl 33182

4a. Article Number
P 265 659 481

4b. Service Type
☐ Registered ☒ Certified
☐ Express Mail ☐ Insured
☐ Return Receipt for Merchandise ☐ COD

7. Date of Delivery
11/7/97

5. Received By: *(Print Name)*

8. Addressee's Address *(Only if requested and fee is paid)*

6. Signature: *(Addressee or Agent)*
X Lisa Matthews

PS Form **3811**, December 1994 Domestic Return Receipt

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Thank you for using Return Receipt Service.

P 265 659 481

US Postal Service
Receipt for Certified Mail
No Insurance Coverage Provided.
Do not use for International Mail *(See reverse)*

Sent to James Jenkins	
Street & Number Rinker Materials	
Post Office, State, & ZIP Code Miami Fl	
Postage	$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	$
Postmark or Date 11-4-97	
0250014-002-AC	

PS Form **3800**, April 1995