Department of Environmental Protection

Jeb Bush
Governor

Southeast District
P.O. Box 15425
West Palm Beach, Florida 33416

David B. Struhs
Secretary

DEC 11 2000

Mr. James S. Jenkins, III
Rinker Materials Corporation
P.O. Box 24635
West Palm Beach, FL 33416

Dear Mr. Jenkins,

The attached Soil Thermal Treatment Facility Inspection Report documents a routine inspection of your facility at 1200 NW 137th Avenue, Miami, FL, by the Department on September 14, 2000. During this inspection, as noted on the attached inspection report, cracks/gouges were noted in the floor of the soil storage building in the south central portion and wearing of the concrete floor surface, exposing rebar, apparently from the action of heavy equipment, was noted in other floor areas. Based on a preliminary investigation by Mr. Emery, it does not appear the cracks penetrate the floor thickness; however, Mr. Emery indicated he is developing a plan to resurface the floor to eliminate the potential for leaching. No other problems were noted during this inspection.

If you have any questions or need further information, please contact Lee Martin at 561-681-6676.

Sincerely,

Paul Alan Wierzbicki

Paul Alan Wierzbicki, P.G.
Waste Cleanup Supervisor

ATTENTION MAIL ROOM
Tallahassee - DEP

Tom Conrardy, MS # 4530
Bureau of Petroleum Storage Systems

Atch: STTF Inspection dated 9/14/00

cc: Robert Johns, Paul Lasa, MDERM, Miami w/atch
Tom Conrardy, Zoe Kulakowski, DEP/BWC, Tallahassee w/atch
Jeff Smith, DEP/WPB w/atch
Don Emery, Mike Vardeman, Rinker Materials, Miami w/atch

Department of Environmental Protection

Jeb Bush
Governor

Southeast District
P.O. Box 15425
West Palm Beach, Florida 33416

David B. Struhs
Secretary

SOIL THERMAL TREATMENT FACILITY INSPECTION REPORT

1. **TYPE INSPECTION:** ___ COMPLAINT X ROUTINE ___ FOLLOW-UP ___ PERMITTING

2. **FACILITY NAME** Rinker Portland Cement Corp.

DER/EPA ID FLD981758485 **COMET SITE ID** 69992

3. **ADDRESS** 1200 NW 137th Ave, Miami, Fl, 33182
Mailing: P.O. Box 24635, West Palm Beach, Fl 33416-4635

COUNTY Dade **PHONE** 305- 221-7645 **DATE** 9/14/00 **TIME** 10:30 am

4. **TYPE OF FACILITY** Thermal Soil Treatment Facility

5. **DESCRIPTION OF OPERATION:**
Facility Operations include limerock mining and contaminated soil processing to produce cement.
Rinker uses kilns fired by coal, natural gas, or used oil in production.

6. **APPL. REGULATIONS:** ___ 62-2, F.A.C. X 62-775, F.A.C.

7. **RESPONSIBLE OFFICIAL:** (Name and Title)
James Jenkins, Vice President

8. **SURVEY PARTICIPANTS AND PRINCIPAL INSPECTORS:**
Lee Martin, FDEP
Don Emery, Rinker Materials

9. **FACILITY LATITUDE** 25°46'57" conf. **LONGITUDE** 80°25'20" conf. 8/93

10. **TYPE OWNERSHIP:** FEDERAL STATE COUNTY MUNICIPAL PRIVATE

11. **NOTICE NO:** SO13-290034 **DATE ISSUED:** 6/28/96 **EXP. DATE:** 6/7/2001
SO13-300512 6/4/98 6/4/2002

Rev 8/18/94

A routine inspection was conducted at the Rinker Portland Cement Corporation's soil thermal treatment facility regulated pursuant to Chapters 62-775, 62-713, and 62-701, Florida Administrative Code (FAC). This facility operates a rotary kiln and utilizes the petroleum contaminated soil and coal tar contaminated soil in the manufacture of cement.

BACKGROUND INFORMATION:

Rinker was issued a General Permit #SO13-290034 to operate a soil thermal treatment facility on June 28, 1996 which expires on June 7, 2001. The Rinker facility was operating as an existing facility as defined in 62-775.200, FAC prior to the effective date of this rule. Additionally, the facility treats coal tar contaminated soil under a Solid Waste Material Recovery Facility Permit #SO13-300512 issued June 4, 1997, which expires on June 4, 2002. A complete process description is provided in the Rinker permit application; however, the process was reviewed at the inspection as follows:

According to Don Emery, prior to accepting any soil for thermal treatment pursuant to 62-775 and 62-701, FAC, Rinker requires a soil analysis profile. Based on this profile, and specific conditions from DEP and Metro Dade Department of Environmental Resources Management (DERM), soils are brought by truck to the soil storage facility. DERM has granted approval authority to Rinker, subject to specific conditions in their DERM solid waste permit. Rinker claims to accept no hazardous wastes as defined in 40 CFR Part 261.

Rinker has operated a materials substitution program since 1991. This program researches and evaluates different alternative materials for use as raw materials in the production of cement or for use as an alternative fuel source in the kilns. Two alternative materials currently in use include the substitution of petroleum contaminated soils for clean silica sand and the substitution of "on-spec" waste oil for fuel oil in kiln burners. Other alternative material substitutions under discussion and/or evaluation for possible future use include: (1) substitution of oily waste water for part of the slurry makeup water, (2) burning tires for fuel, (3) replacing FP&L slag with other power plant ashes such as ash from MSW incinerators, (4) using spent petroleum catalyst as an aluminum source, (5) blending oily sludges with contaminated soils, and (6) treatment of other petroleum contaminated materials.

Rinker has received approval for burning old tires as a fuel and iron supplement. Previously the tires were injected whole, two at a time, through a patented system during each rotation of the kiln; however, the new dry process vertical kiln system recently became operational and it is not clear how the tires might be handled in the future.

Rinker has received a determination that the use of spent petroleum catalyst as an aluminum source is not regulated under 62-775, F.A.C.; however, the characteristics provided would make storage on the bare ground inappropriate. Several loads (10-12) of spent catalyst from a Hess operation in Puerto Rico were received in the past, but handling problems due to the extremely dusty nature of the material has delayed subsequent shipments while a pneumatic off-loading and handling system is being investigated.

Rinker has applied for and received a Solid Waste Material Recovery Facility Permit No. SO13-300512, which allows Rinker to accept and treat certain coal tar contaminated soils. Rinker first accepted coal tar contaminated soils from mid June-mid August 1997 and revised the treated soil reporting form to reflect the coal tar parameters. According to Mr. Emery, during this inspection period Rinker has not treated any coal tar contaminated soils.

Rinker has applied for an alternative procedure to allow processing of certain petroleum related sludges/residues and other soil like materials along with petroleum contaminated soil. This request has been approved under Alternate Procedure No. AP-STTF0036 with certain restrictions.

The afterburner system for the petroleum contaminated soils is in operation, the soils process through a preliminary kiln (stone dryer) with afterburner, then go through the primary, dry process, vertical cement kiln. Preliminary in house analysis of the soils, although not required, indicate the soils meet clean soil criteria for VOC's before they are processed through the cement kiln.

SOIL STORAGE FACILITY:

Incoming soils to be thermally treated by Rinker arrive by independent contractors via truck, are weighed, and taken to the Material Screening Building (MSB) for processing. Rinker has changed their policy concerning drum handling due to the increase in drill cuttings received in drums and the subsequent bottle neck caused in the off loading area. The drums are placed in the Northwest corner of the MSB and emptied as time permits and during this inspection all drums observed were located inside the building.

Once emptied the drums are then rinsed at the drum washing area and crushed for salvage. The rinse water is contained on site and the sediments are returned to the soil storage facility. The MSB located South of the railroad tracks became operational February 9, 1992 and consists of a 100' by 300' monolith concrete slab sealed to solid concrete walls on three sides with a concrete curb across the front. The MSB has an open front to accommodate trucks and equipment, enclosed sides, and a roof. The floor slopes to the southeast corner where a sump is located to collect any contaminated water from wind blown rain seeping through the contaminated soils. The leachate collection tank has been relocated outside the Southeast corner of the MSB. The tank is within a secondary containment structure and piping outside the facility is double-walled. An additional interior concrete curb sloping away from the Northeast front wall toward the interior of the MSB had been installed. An additional stem wall has been constructed along the Northeast front wall and rain gutters have been redirected after investigation following the December 1996 inspection. Mr. Emery indicated during this inspection that based on preliminary investigation and construction details of the floor, the cracks and gouges noted in the south central portion of the floor on the previous inspection do not penetrate the full thickness of the slab; however, he is developing a resurfacing plan to prevent any potential for leaching. This will continue to be checked in the future. The four groundwater wells off the corners of the MSB have flush mounted manhole lids with locking watertight caps.

The metal and plastics removed from the soils are collected for transport to the County landfill; Rinker should maintain receipts for proper disposal. The larger concrete debris screened out initially are taken to the rock crusher to be pulverized separately and mixed back in with the contaminated soils at the MSB. Spent oil filters are drummed and stored separately at the MSB and processed for recycling to Cliff Berry, Inc. A covered dumpster had been located in the Northeast corner of the MSB to allow collection of oily wastes/sludges which are mixed with the fuel oil and burned in the kiln, but was not present during this inspection.

RECORDKEEPING:

Rinker has received a Department alternative procedure approval (File No. AP-STTF001) for testing of contaminated soils. Rinker relies solely on the test results supplied by other labs; however, Rinker requires acknowledgment of a Department approved Quality Assurance plan from the labs supplying the data. Rinker performs spot checks of some samples. Rinker also performs groundwater analyses through their in-house laboratory, under a Department approved Quality Assurance Plan, for their Groundwater Monitoring Plan. A review of records for untreated soil for May 2000 indicated some batches of untreated soils were received which exceeded the clean soil criteria for metals; however, spot checks on some of these batches were made and blending records were provided as required by 62-775.400(4), FAC. Additionally, Rinker has received alternative procedure approval (File No. AP-STTF0051) on January 2000 for routine treatment of soils exceeding the Arsenic cleanup target level in Chapter 62-713, FAC, in the manufacture of cement. Rinker began treating low level PCB contaminated soils in April 1994 and developed a form to track the source, soil PCB content, quantity, PCB concentration, pounds PCB treated, and cumulative year to date PCB treated. No PCB contaminated soils were received during May 2000. Rinker began treating coal tar contaminated soils in mid-June 1997 and developed a form to track the required analytical data for the treated soils, no coal tar contaminated soils were processed during this inspection period. A review of treated soil (clinker) forms for Total analyses indicates the results from nine samples for Arsenic exceed the residential cleanup target level and for TCLP analyses indicates the results from ten samples for Barium, seven samples for Cadmium, four samples for Chromium, and six samples for Lead exceed the respective groundwater standard; however, all this material is stabilized in concrete rather than disposed of as clean soil. The remainder of the cleanup target level criteria in 62-713, FAC, was not exceeded.

SUMMARY:

The MSB provides for proper handling and storage of petroleum contaminated soils, low level PCB contaminated soils, coal tar contaminated soils, and certain other soil like materials and allows Rinker to process contaminated soils in an environmentally sound manner. No other signs of discharge were noted and all facility personnel were very cooperative.

EXHIBIT E

Florida Department of Environmental Regulation

STATIONARY SOIL THERMAL TREATMENT FACILITY

INSPECTION REPORT

Name of Facility RINKER MATERIALS

Location 1200 N.W. 137th AVE., MIAMI, FL

General Permit No. SO 13-290034 Date of Inspection 9/14/00

Contact Person DON EMERY

Person Completing Report LEE MARTIN

Instructions: Complete the appropriate spaces for each item listed below. Use comments space to provide additional information for each item. Additional paper may be used if necessary.

Yes	No	SITE SURVEY	
✓		1.	Does information provided on general permit notice of intent form coincide with actual facility?
✓		2.	Is soil sampling procedure correct?
✓		3.	Are monitoring wells properly installed (proper number and location)?
✓		4.	Are monitor wells being properly sampled and analysed for required parameters?
✓		5.	Is untreatd soil stockpiled separately from treated soil and properly identified?
✓		6.	Is untreated soil adequately covered by roofing?
See comments		7.	Do floors for storage appear to be properly constructed and in good condition?
✓		8.	Are floors properly bermed to provide runoff control?
✓		9.	Is a leachate collection system provided?

Yes	No	REPORTING FORMS	
✓		10.	Are untreated soil reporting forms being properly completed? starting date 5/2/00 end date 5/31/00
✓		11.	Are treated soil reporting forms being properly completed? starting date 2/15/00 end date 7/31/00

12. Indicate frequency clean soil criteria is being met?
    a. 100 % TRPH - 10 mg/kg, or
    b. ____ % TRPH - 50 mg/kg, PAH - 6 mg/kg, and VOH - 50 ug/kg

13. Indicate ranges and approximate median values of untreated soil analyses for the following parameters.
    a. TRPH BDL mg/kg to 72000 mg/kg, median 1013 mg/kg
    b. VOA BDL mg/kg to 10400 mg/kg, median .475 mg/kg
    c. Arsenic BDL mg/kg to 55 mg/kg
    d. Barium 1.0 mg/kg to 981 mg/kg
    e. Cadmium BDL mg/kg to 5.43 mg/kg
    f. Chromium BDL mg/kg to 58 mg/kg
    g. Lead BDL mg/kg to 210 mg/kg
    h. Mercury BDL mg/kg to .23 mg/kg
    i. Selenium BDL mg/kg to 10 mg/kg
    j. Silver BDL mg/kg to 4.05 mg/kg

14. Indicate ranges and approximate median values of treated soil analyses for the following parameters.
    a. TRPH BDL mg/kg to BDL mg/kg, median BDL mg/kg
    b. VOA BDL mg/kg to BDL mg/kg, median BDL mg/kg
    c. Arsenic BDL mg/kg to 7.7 mg/kg
    d. Barium 95 mg/kg to 1500 mg/kg
    e. Cadmium BDL mg/kg to 6.5 mg/kg
    f. Chromium 2.3 mg/kg to 181 mg/kg
    g. Lead BDL mg/kg to 60 mg/kg
    h. Mercury BDL mg/kg to BDL mg/kg
    i. Selenium BDL mg/kg to 0.9 mg/kg
    j. Silver BDL mg/kg to 8.1 mg/kg
    k. _____ _____ mg/kg to _____ mg/kg
    i. _____ _____ mg/kg to _____ mg/kg

Comments: THE FLOOR IN THE SOUTH CENTER PORTION OF THE SOIL STORAGE BUILDING DISPLAYED CRACKS AND THINNING DUE TO ABRASION FROM FRONT END LOADERS, MR. EMERY STATED THAT BASED ON PRELIMINARY INVESTIGATION & CONSTRUCTION DETAILS OF THE FLOOR THE CRACKS DID NOT PENETRATE THE FULL SLAB, ADDITIONALLY, HE WAS DEVELOPING A PLAN TO RESURFACE THE AREA TO PREVENT THE POTENTIAL FOR LEACHING.

William L. Martin
Signature

11/27/00
Date