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September 22, 2000

STATE OF FLORIDA
DEPT. OF ENV. PROTECTION
NORTHEAST DISTRICT-JAX

VIA FAX AND FEDEX

Mr. Chris Kirts
Florida Department of
Environmental Protection
7825 Baymeadows Way, Suite B-200
Jacksonville, FL 32256-7590

Subject: Florida Rock Industries, Inc.
Thompson S. Baker Cement Plant
Permit No. AC01-267311/PSD-FL-228
Hydrocarbon Emission Measurements

Dear Mr. Kirts:

As discussed during our meeting in your office on Monday, September 18, 2000, we are hereby transmitting total hydrocarbon emission data for the Florida Rock Industries (FRI) Thompson S. Baker Cement Plant developed during the period May 31-June 2, 2000 and total hydrocarbon and methane emission data from the plant developed on August 2, 2000. The emission data developed during the period May 31-June 2, 2000, were based on preliminary, in-house measurements made during the shakedown period of the plant. Being preliminary, in-house measurements, the formalities required of official compliance tests were not applicable. The total hydrocarbon and methane emission data developed on August 2, 2000, were part of an ongoing effort by FRI to evaluate anomalous hydrocarbon emissions and specifically, to determine the methane contribution to total hydrocarbon (THC) emissions. FDEP was notified that this testing would be conducted and, as a result, two copies of a report of that test effort are attached hereto.

The THC measurements made during the period May 31-June 2, 2000, were preliminary, in-house measurements conducted during the shakedown period of the plant as allowed by air construction permits. The measurements were made with a flame ionization total hydrocarbon analyzer; the instrument specified by EPA Method 25A. Being preliminary, in-house measurements, the emission measurements did not comply with all of the requirements of EPA Method 25A.

Deviations from Method 25A included:

- The THC analyzer was not calibrated before and after each period of time for which emission data are reported.
- Stack gas flow rate measurements did not correspond to the specific periods of time when THC measurements were made.
- The performance of the THC analyzer was not documented as required by EPA Method 25A.
- Plant operating parameters were not documented.

The THC measurements began on May 31, 2000. At that time, the plant was operating in the direct mode (raw mill down) and the plant was not operating normally as indicated by a stack gas temperature of approximately 323°F. The normal stack gas temperature when the plant is operating in the direct mode is 250-260°F. During the period of measurement on May 31, 2000, THC emissions from the plant averaged approximately 71.7 pounds per hour.

The THC measurements continued on June 1, 2000. By this time, the plant was operating in the compound mode (both kiln and raw mill operating) and operations appeared normal based on stack gas flow and stack gas temperature (in the range of 207-209°F). The THC emissions for two measurement periods of approximately one hour each in duration averaged 52.6 pounds per hour and 46.4 pounds per hour.

The THC measurements continued on June 2, 2000, again with the plant operating normally in the compound mode based on stack gas flow and stack gas temperature. THC emissions for two periods approximately one hour in duration each on June 2, 2000, averaged 43.0 and 40.6 pounds per hour.

Again, the THC emission measurements conducted during the period May 31-June 2, 2000, were preliminary in-house measurements conducted to help FRI establish plant operating parameters. The measurements made during this period did not follow EPA Method 25A protocol and the formalities required of official compliance tests were not applicable.

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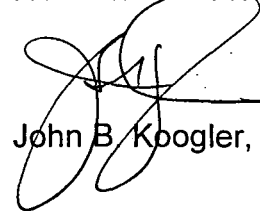
The THC and methane emission measurements conducted on August 2, 2000, and reported in the enclosed reports, are part of FRI's continuing effort to evaluate the cause of anomalous hydrocarbon emissions. The THC emission measurements were conducted in accordance with EPA Method 25A and the methane emission measurements were conducted in accordance with EPA Method 25. FDEP was notified that the emission measurement would be conducted and an FDEP observer was on site.

During the period of measurement on August 2, 2000, the plant was operating in the compound mode and was operating normally based on stack gas flow and stack gas temperature. During this period of time, the THC emissions averaged 43.2 pounds per hour and the methane emission rate averaged 5.8 pounds per hour. The non-methane hydrocarbon emissions (or VOCs) averaged 37.4 pounds per hour.

If there are questions regarding these data, please feel free to contact me at 352-377-5822.

Very truly yours,

KOOGLER & ASSOCIATES



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

JBK:wa
Enc.

c: Mr. Lalit Lalwani, FDEP
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