

**DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: Stack Test Observation**

B155929625

FACILITY: St. Marys Cement, Inc. (U.S.)		SRN / ID: B1559
LOCATION: 16000 BELLS BAY RD, CHARLEVOIX		DISTRICT: Cadillac
CITY: CHARLEVOIX		COUNTY: CHARLEVOIX
CONTACT: Cortney K. Schmidt, Environmental Engineer		ACTIVITY DATE: 05/27/2015
STAFF: Kurt Childs	COMPLIANCE STATUS:	SOURCE CLASS: MAJOR
SUBJECT: ROP Rule 331 and CAM annual PM testing of Main and Bypass stacks.		
RESOLVED COMPLAINTS:		

On 5/27/2015 I attended stack testing conducted by St. Marys Cement to determine compliance with the PM emission limits for the main and bypass stacks of FGKILNRAWMILLS. Mr. Dave Patterson of the AQD Technical Programs Unit also attended the test. MI-ROP-B1559-2014 requires annual PM emission testing to demonstrate compliance with the 0.25lb/1,000 lbs exhaust gas limit and to correlate PM emissions to opacity, as monitored by the COMS system, for Compliance Assurance Monitoring (CAM).

At the time of the test the weather was overcast with fog and rain. The temperature was 60 degrees with 15 mph winds from the Southwest. The stack testing was conducted with the roller mill operating and both the main and bypass stacks being sampled simultaneously. EST was conducting the test and "auto sampler" meter boxes were being used.

The first test run began at 10:19 AM the testers were having difficulty getting the sample probe to temperature due to the weather conditions. Operating parameters to be monitored during the test include:

Opacity monitor data

Baghouse differential pressure (main)

Baghouse leak detection data (bypass)

Raw material feed rates to the raw mill and kiln

Fuel feed rate to the flash furnace and kiln

All of this data is available on the plant control system and can be observed as instantaneous readings or as historical data.

During the test I observed the following operating data:

Opacity, 2.3%.

Baghouse differential pressure (main), 7.65".

Baghouse leak detection data (bypass), North outlet 10%, South outlet 0-5%. Diff. press. Also available 3.0".

Raw material feed rates to the raw mill and kiln, 320/345 tons per hour.

Fuel feed rate to the flash furnace and kiln, approx. 6tph to FF/7tph to kiln. Also 3.7 tph Alt fuels to FF.

Following the conclusion of the first run the second run was delayed due to extended time necessary to heat the sample probes to 225 degrees F. I left at the start of the second run to attend to other inspection commitments. Dave Patterson stayed. Later in the day I received a call from Mr. Cortney Schmidt of SMC who stated that the second run had been completed but prior to the third run a malfunction caused the raw mill to shut down. He did not know how long the raw mill would be down. He asked if they could continue the third run with the raw mill down or if they had to wait until it was back up.

The test protocol and approval specified testing with the raw mill up as this is the potentially worst case scenario for PM emissions. Two test runs had been completed with the mill up. I recommended they try to get the raw mill back up and then continue testing but if that was not possible they could proceed with the test since we had two test runs with it up and could determine if there were a significant difference. The baghouse is very efficient and PM emissions would likely not be affected significantly.

NAME 

DATE 6-3-15

SUPERVISOR 