

## STATE OF MICHIGAN

## DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY



SRN: B1559, Charlevoix County

CADILLAC DISTRICT OFFICE

June 4, 2020

## **VIA US MAIL & E-MAIL**

Mr. Matthew Simon, Operations Manager St. Mary's Cement, Inc., Charlevoix Plant 16000 Bells Bay Road Charlevoix, Michigan 49720

Dear Mr. Simon::

## **SECOND VIOLATION NOTICE**

On April 24, 2020, the Department of Environment, Great Lakes, and Energy (EGLE), Air Quality Division (AQD), Air Quality Division (AQD), received revised emissions testing reporting from St. Mary's Cement, Inc. (SMC) located at 16000 Bells Bay Road, Charlevoix, Michigan. This reporting is required by Permit to Install (PTI) 140-15; Title 40 Code of Federal Regulations (CFR), Part 63, Subpart LLL; Renewable Operating Permit (ROP) Number MI-ROP-B1559-2014; and Michigan Air Pollution Control Rules. This reporting was sent in response to a Violation Notice sent March 25, 2020, citing St. Mary's Cement, Inc. for unacceptable emissions limit compliance testing for Organic Hazardous Air Pollutants (OHAPs). This previously cited violation is as follows:

Process Description	Rule/Permit Condition Violated	Comments
EUINLINEKILN	40 CFR 63.1343(b)(1), Table 1	Testing performed for compliance with the Organic Hazardous Air Pollutant (OHAP) emission limit is not acceptable.

A review of this revised reporting has demonstrated that it does not resolve the violation cited, and therefore the response to the March 25 Violation Notice has been considered insufficient. The methodology and reported results for total xylenes, while not ideal, are acceptable for this testing event. Following is a summary of the initial rejection justifications and reported revisions in question that are not acceptable, and the justification to reject these revisions:

- Naphthalene was not included in the laboratory analysis. The amended reporting indicated
  that naphthalene was reported through a surrogate and not measured directly. Determination
  of a pollutant concentration through a surrogate is not addressed in USEPA Method 18 and,
  therefore, must be approved prior to testing per 40 CFR 63.1341 and 40 CFR 63.7(e)(2)(ii)
  and (f).
- Collected condensate containers arrived at the contract laboratory with headspace. The
  amended reporting indicated that, while the headspace in the condensate containers was
  observed, amended, and accounted for at the contract laboratory prior to analysis, data
  would indicate no significant difference in the results. The compounds to be analyzed for

Mr. Matthew Simon St. Mary's Cement Page 2 June 4, 2020

this testing by Method 18 are essentially insoluble in water. Because of this, it is accepted practice to ensure no headspace is in the collection vessels at the completion of sample collection as some of these compounds will readily diffuse out of solution into the headspace and not accounted for in the analysis. The laboratory identified this error upon receipt, correctly amended it by adding water to remove the headspace and compensating for the additional volume of the sample when reporting the results. Regarding the point that these potential losses would make no significant difference, it should be noted that the emission limit as stated in 40 CFR 63.1343(b)(1), Table 1 for OHAP, is 12 parts per million by volume on a dry gas basis (ppmvd) and the testing result, when accounting for significant figures, is 12 ppmvd.

- Quality assurance analyte spiking of collected condensate was not performed. The
  amended reporting references page 209 of the testing report as indication of analyte spiking.
  Method 18, Section 8.2.4. requires that spiking of the carbon tubes and the condensate
  collection vessels be performed prior to the sampling event. The referenced spiking on this
  page is the internal laboratory quality assurance spiking which occurred at the laboratory
  after the sampling event.
- Styrene and Naphthalene spiking in the activated carbon collection tubes did not meet acceptable quality assurance recovery standards. The acceptable range for spike recovery per Method 18 is between 70% and 130%. The reported spike recoveries for Styrene and Naphthalene were 48% and 21% respectively. The spike recovery values are acknowledged in the revised reporting to be outside of acceptable ranges pursuant the Method 18. Method 18, 8.4.3.1 states that if the spike recoveries are outside of these ranges, the sampling methodology is not acceptable. Also, it is suggested in the revised reporting, and the AQD agrees, that an alternative method should have been used for this sampling and should have been proposed and approved prior to testing.
- No analysis regarding breakthrough of the activated carbon collection tubes was performed. There are some inconsistencies in the explanation provided. The protocol for this testing was not formally reviewed or approved by the AQD as the timelines listed in the protocol itself and Michigan Air Pollution Control Rule R 336.2001 were not adhered to. Specifically, the protocol was submitted less than 30 days prior to the testing event. In communications prior to testing and upon review of the protocol after the fact, there is no mention of the caveat of breakthrough analysis and how that will be addressed.

Please submit a written response to this Violation Notice by August 4, 2020 (which coincides with 30 calendar days from the date of this letter). The written response should include: a summary of the actions that are proposed to be taken to correct the violation and the dates by which these actions will take place.

Please submit the written response to the DEQ, AQD, Cadillac District, at 120 West Chapin Street, Cadillac, Michigan 49601 and submit a copy to Ms. Jenine Camilleri, Enforcement Unit Supervisor at the DEQ, AQD, P.O. Box 30260, Lansing, Michigan 48909-7760.

If St. Mary's Cement believes the above observations or statements are inaccurate or do not constitute violations of the applicable legal requirements cited, please provide appropriate factual information to explain your position.

Mr. Matthew Simon St. Mary's Cement Page 3 June 4, 2020

Thank you for your attention to resolving the violation cited above. If you have any questions regarding the violation or the actions necessary to bring this facility into compliance, please contact me at the number listed below.

Sincerely,

Rob Dickman

Senior Environmental Quality Analyst

Air Quality Division

231-878-4697

cc: Ms. Mary Ann Dolehanty, EGLE

Dr. Eduardo Olaguer, EGLE

Ms. Jenine Camilleri, EGLE

Mr. Christopher Ethridge, EGLE

Mr. Shane Nixon, EGLE