



Scott Evans
Environmental Quality Analyst
EGLE, AQD, Grand Rapids District
350 Ottawa Avenue, NW, Unit 10
Grand Rapids, Michigan 49503

RE: Response to April 30, 2020 Violation Notice

Dear Mr. Evans,

Keebler Company, Grand Rapids Bakery is in receipt of a Violation Notice (VN) issued by the Michigan Department of Environment, Great Lakes, and Energy (EGLE), Air Quality Division (AQD). The VN is dated April 30, 2020 and alleges violations of the 25 ton per year VOC emission limit applicable to Oven 2 established in the Grand Rapids Bakery's permit (PTI No. 206-08H).

The VN requests this written response to include: the dates the excess emissions occurred; an explanation of their causes and duration; whether the excess emissions are ongoing; a summary of corrective actions taken or those proposed to be taken; dates by which such actions were, or will be taken; and steps to prevent a reoccurrence. In response, the Grand Rapids Bakery is providing the following information.

The facility's monthly recordkeeping shows that Oven 2 emission calculations first exceeded the 25 ton per year VOC emission limit at the end of May 2019. The 12-month total VOC emission calculations for that period were 25.59 tons. VOC emission calculations have continued above the permit limit every month since.

The excess emissions at the root of the VN are a phenomenon of a change in emission calculation methodology, they do not represent an actual increase in the emissions being vented to the atmosphere. When PTI No. 206-08H was issued in February 2019, the previous emission calculation method was changed to increase emissions of propylene glycol (a major component of many flavorings used) by a factor of 5. Up until that point, emissions of propylene glycol were calculated at 20 percent of their content in the products.

The 20 percent emission factor was based on stack testing conducted at the Grand Rapids Bakery in 2008. Since that time, the products have not changed, oven operating parameters have not changed, nor has the volatility of propylene glycol. Therefore, the emission factor proven by testing is still valid. Nevertheless, in order to avoid the costs of re-testing the oven to re-prove the emission factor, the Grand Rapids Bakery agreed to eliminate the emission factor from its permit, believing emissions would remain below its permit limits. However, an increase in propylene glycol containing flavors and the new calculation method resulted in calculated emission rates above the permit limit. Without the new calculation method, 2019 emissions would not have exceeded the permit limit - reaching a maximum of 19.50 tons per year.





To correct this situation, the Grand Rapids Bakery is proposing to conduct sampling and analysis of a number of propylene glycol rich flavorings using US EPA Method 24 to obtain a VOC-content for the flavorings. To date, the Grand Rapids Bakery has identified several laboratories that are capable of performing the Method 24 analysis. It is expected the sampling and analysis will be conducted and results obtained before the end of June 2020, as long as Covid-19 travel restrictions allow this work to be completed. The results of these analyses are expected to confirm the propylene glycol emission factor previously demonstrated through stack testing.

If the Method 24 approach is inconclusive, or provides unexpected results, the Grand Rapids Bakery will evaluate stack testing to re-prove the 20 percent propylene glycol emission factor. If needed, testing will include providing a test protocol, notification, and post-test report of results to the Air Quality Division in accordance with regulatory timelines. Also, if testing is required, the Grand Rapids Bakery believes a testing firm can be identified and testing scheduled within 60 - 75 days following the completion of the Method 24 assessment.

If you have any questions regarding this response, or compliance plan, please feel free to contact me.

Sincerely,



Jeff Kramer
Keebler Company

CC: Jenine Camilleri, EGLE