

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: On-site Inspection

N826557904

FACILITY: Hearthside Food Solutions LLC		SRN / ID: N8265
LOCATION: 3061 SHAFFER AVE, KENTWOOD		DISTRICT: Grand Rapids
CITY: KENTWOOD		COUNTY: KENT
CONTACT: Andy Shira , Safety Manager		ACTIVITY DATE: 03/19/2021
STAFF: Scott Evans	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: On-site air quality inspection.		
RESOLVED COMPLAINTS:		

Intro

On Friday, March 19, 2021, State of Michigan Department of Environment, Great Lakes, and Energy (EGLE) Air Quality Division (AQD) staff member Scott Evans (SE) conducted an announced, on site inspection of the Hearthside Food Solutions facility located at 3061 Shaffer Ave. in Grand Rapids, Michigan, to assess compliance with Permit to Install (PTI) No. 127-09A and all other applicable air quality regulations. This inspection was scheduled ahead of time to ensure proper safety measures could be met during the ongoing COVID-19 pandemic.

On the date of inspection, SE arrived at the facility and circled the perimeter of the facility, checking for signs of emissions. There were no visible emissions seen and the only odors present were those of baked goods. Upon entry into the facility, SE was greeted by Safety Manager, Andy Shira (AS). After initial introductions and a discussion of the purpose of the visit, AS lead SE through the facility to conduct a walking inspection. This walking inspection went by all production lines used to manufacture cereal and granola-based products, through the maintenance facilities, to the roof of the facility, and then through the expansive storage area, which was once the location of bread making equipment. Proper PPE such as masks and social distance were maintained throughout the inspection.

Compliance Evaluation

This facility is a manufacturer of baked products such as granola and cereal bars. Historically the facility has also produced many bread products, but the bread-making equipment was shut down in May of 2018 and all process equipment has since been removed. The process of modifying the existing PTI was discussed, but it was expressed by AS that the facility wishes to wait on beginning the process as there are ongoing discussions on whether or not the facility will again use the space for production. This discussion has been prolonged due to the COVID-19 pandemic. SE advised AS that once a decision has been made, the facility should work with the AQD to progress with any permit modifications that may need to be conducted.

Currently there is one active permit at the facility: PTI No. 127-09A.

PTI No. 127-09A

This permit is a Synthetic Minor opt-out permit. It covers one flexible group: FGFACILITY. This flexible group includes all process equipment source-wide.

There are three emission limits described for this flexible group:

- Less than 9.0 tons per year (tpy) for each individual Hazardous Air Pollutant (HAP) determined each month for every 12-month rolling time period.

- Less than 22.5 tpy for aggregate HAPs determined each month for every 12-month rolling time period.
- Less than 90.0 tpy for Volatile Organic Compounds (VOCs) determined each month for every 12-month rolling time period.

When discussed with the facility, AS was familiar with this permit and the limits outlined within.

The permit outlines one operational restriction: No more than 104,774,445 lbs of bread per 12-month rolling time period determined at the end of each month. As mentioned above, the facility no longer produces bread products and has removed the associated production equipment, as was confirmed during the on-site inspection. As mentioned, the facility is presently in discussion of whether or not to resume bread production or use the space otherwise and will pursue appropriate steps towards permit modification once decisions have been made.

The permit outlines requirements for the facility to verify VOC and HAP emission factors for any production line at the request of the AQD. At this time there is no reason to believe that the emission factors being used as guided by manufacturer data and historic stack testing for all ingredients and flavorings is inaccurate. As such, there is no request for such testing and current calculation methods are acceptable.

As required by the permit, the facility was able to provide manufacturer data for each flavoring material to demonstrate HAP and VOC content. Though the facility is also required to provide records of all bread production at the facility, as discussed above, the bread production line has been inactive since 2018 and the equipment has been removed. Therefore, there was no data to provide regarding bread production.

The facility is required to keep the following data regarding VOCs on a monthly basis:

- Amount of each VOC-containing material used.
- Amount of VOC-containing material reclaimed.
- VOC emission factor data as determined from most recent stack testing performed and approved by the AQD.
- Monthly VOC mass emissions calculated by using emission factor data.
- 12-Month rolling time period VOC mass emissions calculated by using emission factor data.

Upon request, the facility was able to provide the above data. A copy of the data spanning from January of 2020 through February of 2021 was provided at the request of SE for a detailed compliance review.

- Amounts used of each flavoring material per month were provided for each month in the requested period.
- No reclamation was reported for any material used.
- The most recent stack test was completed in 2009, through which emission factors were established and approved by the AQD. At this time this data appears to still be accurate.
- Monthly VOC data was provided, with the highest recorded month within the provided time period being 3.08 tons emitted in October 2020. This data was calculated appropriately using emission factor data.
- 12-Month rolling time period data was provided as requested. Historic data showed a sharp drop in annual VOC emissions that coincided with the shutting down of the bread production lines. While VOC

emissions often reached ~50 tpy while the bread production line was active, the highest recorded 12-month rolling time period VOC emissions were recorded in May 2019 at 23.073 tpy. This is well within the limit of 90 tpy as outlined in PTI No. 127-09A.

The facility is required to keep the following data regarding HAPs on monthly basis:

- HAP emission factor data as determined from most recent AQD approved stack test.
- Individual and aggregate monthly HAP emissions.
- Individual and aggregate 12-month rolling HAP emissions.

Along with the VOC data provided, as described above, HAP data for the facility was provided for the period of January 2020 through February 2021. The following analysis was determined from the provided data:

- As described above, the most recent stack test occurred in 2009. The emission factor data determined from that test appears to still be accurate at this time.
- Historically, Formaldehyde and Acetaldehyde have been the only HAPs with potential emission at the facility. However, the last recorded monthly use of any materials containing these HAPs was in January of 2018. Therefore, the facility had no individual or aggregate HAP emissions to report.
- As discussed above, the facility ceased the use of any HAP containing materials in production in January of 2018 and so have no annual HAP emissions to report at this time.

Since no HAPs were emitted within the past three years, the facility is compliant with the limitations outlined above regarding individual and aggregate HAP emissions. This change in HAP emission levels appears reasonable and accurate as it coincides with the shutdown of the bread production line, which was the production line in which the HAP-containing ingredients were emitted.

Exempt Equipment and Other Items

As mentioned above, the roof of the facility was visited as part of the walking inspection. The facility has no stack requirements. During the roof inspection it was observed that no particulate matter (PM) had accumulated on the roof, demonstrating that no unexplained fugitive PM emissions were occurring at the facility. No other odors or unexplained emissions were observed either.

The facility has multiple storage tanks on site. These storage tanks are used for storage of cooking oils. They are exempt from permitting requirements under Rule 284(2)(l).

The facility has three boilers on site. These boilers are all natural gas-fired and are under 10 mmBtu/hr. All three are exempt from air permitting requirements under Rule 282(2)(a)(v). All three were built and installed in different years: 1987, 2000, and 2010. As all three boilers are below 10 mmBtu/hr, none are subject to the New Source Performance Standard (NSPS) 40 CFR Part 60 Subpart Dc. Since all three boilers are natural gas-fired, they are not subject to the National Emission Standard for Hazardous Air Pollutants (NESHAP) 40 CFR Part 63 Subpart JJJJJ.

The facility had one small cold cleaner located in the maintenance area. This unit was small and the lid was closed during the inspection. It is exempt from air permitting requirements under Rule 281 (2)(h).

Conclusion

At the conclusion of this inspection, the facility appears to be compliant with requirements outlined in PTI No. 127-09A as well as all other applicable air quality regulations.

NAME Scott Evans DATE 5/4/2021 SUPERVISOR AKH