

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

P011770468

FACILITY: Roskam Baking Co		SRN / ID: P0117
LOCATION: 5353 and 5565 Broadmoor, KENTWOOD		DISTRICT: Grand Rapids
CITY: KENTWOOD		COUNTY: KENT
CONTACT: Steve Formsma , Facilities Manager		ACTIVITY DATE: 12/05/2023
STAFF: Scott Evans	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: On-site inspection to assess compliance with air quality rules and regulations.		
RESOLVED COMPLAINTS:		

Introduction

On December 6, 2023, State of Michigan Department of Environment, Great Lakes, and Energy Air Quality Division staff member Scott Evans (SE) conducted an on-site inspection of the Roskam Baking Co. facility located at 5353 and 5565 Broadmoor in Kentwood, Michigan, to assess compliance with permitted and all other air quality rules and regulations. This was a USEPA led inspection with representatives Emma Leeds, Dakota Prentice, and Justin Smith. Roskam Baking Co. is a producer of various baked goods including pita chips, crackers, and frozen waffles. Processes include dough mixing vats, baking ovens, and seasoning operations. This facility does on site packaging as well as cold storage of frozen products in addition to food production. This facility is an opt-out source with limits on Hazardous Air Pollutants (HAPs), Volatile Organic Compounds (VOCs), and Nitrogen Oxides (NOx) emissions, and is a minor source of Particulate Matter (PM), and has one active Permit to Install (PTI): PTI No. 131-18.

Upon arrival at the facility, observations were made of the perimeter of the facility. No visible emissions (VEs) were observed and faint odors of baked goods were noted. After entering the facility, SE and EPA representatives were greeted by Dave Sikkenga and Steve Formsma. After a discussion of the purpose of the day's visit, a site inspection was conducted.

PTI No. 131-18

This permit was issued on December 3, 2018. It includes requirements for one flexible group (FG): FGFACILITY.

FGFACILITY

This FG includes All process equipment source-wide including equipment covered by other permits, grand-fathered equipment, and exempt equipment.

This FG has four emission limits as outlined in the following table:

Pollutant	Limit	Time Period / Operating Scenario	Highest Recorded	Compliance (Y/N)
1. VOCs	Less than 89.9 tpy*	12-month rolling time period as determined at the end of each calendar month	16.14 tpy	Yes
2. NO _x	Less than 89.9 tpy*	12-month rolling time period as determined at the end of each calendar month	34.78 tpy	Yes
3. Each Individual HAP	Less than 8.9 tpy**	12-month rolling time period as determined at the end of each calendar month	<1 tpy	Yes
	Less than 22.4 tpy**		2.17 tpy	Yes

Pollutant	Limit	Time Period / Operating Scenario	Highest Recorded	Compliance (Y/N)
4. Aggregate HAPs		12-month rolling time period as determined at the end of each calendar month		

Compliance determinations for the above limits were made during a review of the provided records as required by the recordkeeping section of the PTI from December 2022 through November 2023. These records are discussed further below.

This FG has two material limits. The first requires that no more than 1,739.5 million ft³ of natural gas be used per every 12-month rolling time period. Records provided demonstrated a highest 12-month rolling time period use of 690.67 million ft³, which is compliant with this limit.

The second material limit states that no more than 145,919,936 lbs. of yeast-raised baked bread be produced for every 12-month rolling time period. Production records provided showed a highest 12-month rolling production rate of 65,780,000 lbs., which is compliant with this limit.

This FG has one operational restriction, which requires that all engines at the facility run for no more than 300 hours combined over any 12-month rolling period. Operational records are maintained and provided a recorded maximum of 56.9 hours, which is compliant with the requirement.

This FG has three testing requirements. The first requires that HAP content of all used materials be determined using manufacturer formula data. This was discussed and the facility confirmed that they utilize manufacturer data.

The second testing requirement is for the use of Method 24 to determine VOC content of materials used unless the use of manufacturer's formula data is approved by the AQD. A request to use formulation data was submitted and approved by the AQD on December 6, 2018. This is what the facility is currently using for emissions calculations. This is acceptable as recipes and products produced are subject to changes depending on contracts and orders, often making testing a prohibitive process. At this time, no further testing is required.

The third testing requirement requires that stack testing be utilized to verify VOC and HAP emission rates from the yeast raised baked bread line and that stack testing be completed within a specific time frame relative to the issuance of the PTI. Stack testing was conducted by the facility in 2019, which satisfied both requirements. The results of this stack test provided VOC and HAP emission rates used in calculations for VOC and HAP emissions shown in the records provided by the facility.

This FG has eight recordkeeping requirements. The first states that records shall be maintained in an acceptable format and available at the end of each calendar month for the previous calendar month. Records were provided on December 18, 2023, and appeared to be in an acceptable format. These records were utilized to make the above compliance determinations.

The second and third requirements state that monthly and 12-month rolling data be maintained for engine operational hours and yeast raised bread production. These records were provided and were used for above compliance determinations.

The fourth and fifth requirements state that the following monthly records be maintained for both VOCs and HAPs:

- Amount of VOC/HAP containing material used.
- Amount of VOC/HAP containing material reclaimed (if any).
- VOC/HAP content of each material.

Provided documents contained the required information in order to assess compliance with emission limits.

The final three requirements require that monthly and 12-month rolling emission data be maintained for NO_x, VOCs, Individual HAPs, and Aggregate HAPs. These records were provided and were utilized to make the above emissions compliance evaluations.

This FG is required to adhere to four New Source Performance Standards (NSPSs) and National Emission Standards for Hazardous Air Pollutants (NESHAP) as follows:

- NSPS 40 CFR Part 60 Subpart A
- NSPS 40 CFR Part 60 Subpart Dc
- NSPS 40 CFR Part 60 Subpart IIII
- NESHAP 40 CFR Part 63 Subpart ZZZZ

The basis for all four requirements revolves around the use of multiple large, industrial boilers and emergency generators on site. NSPS 40 CFR Part 60 Subpart A is applicable as there are multiple other applicable requirements that the facility is expected to adhere to. Compliance with the PTI and other NSPS/NESHAP requirements demonstrated compliance with Subpart A. These remaining requirements are discussed below as exempt equipment as the boilers are exempt from air permitting requirements.

Exempt Equipment

This facility has a total of eight large boilers that are used on site. They have install dates and heat inputs as follows:

- Installed April 2009 – 16.7 mmBtu
- Installed August 2009 – 12.555 mmBtu
- Installed August 2009 – 12.555 mmBtu
- Installed April 2011 – 12.555 MMBtu
- Installed November 2015 – 21 mmBtu
- Installed September 2017 – 21 mmBtu
- Installed September 2017 – 20.9 mmBtu
- Installed February 2019 – 21 mmBtu

All eight boilers are exempt from air permitting requirements under Rule 282(2)(b)(i). All eight of these boilers are subject to NSPS 40 CFR Part 60 Subpart Dc. Initial installation notifications are on file with the AQD. Since all eight boilers at this opt-out source of HAPs are natural gas-fired, they are not subject to the NESHAP 40 CFR Part 63 Subpart JJJJJ.

This facility has two emergency generators on site. They have install dates and heat inputs as follows:

- Installed 1987 – 4 mmBtu
- Installed 1983 – 5.35 mmBtu

Both generators are diesel fired engines and are exempt from air permitting requirements by Rule 285(2)(g), which exempts internal combustion engines of less than 10 MMBtu. Neither generator is subject to NSPS 40 CFR Part 60 Subpart IIII as they were installed prior to 2005. Neither generator is subject to NESHAP 40 CFR Part 63 Subpart ZZZZ as they are both existing units that are not contractually obligated to be available for >15 hours per calendar year and are for emergency use only.

The facility has one diesel fired fire pump engine on site for their fire suppression system. This engine was installed in 2007 and has a maximum heat input of 1.6 mmBtu. This engine is exempt from air permitting requirements by Rule 285(2)(g) as it is an internal combustion engine of less than 10 MMBtu. This engine is not subject to NSPS 40 CFR Part 60 Subpart IIII as it is a fire pump engine that was installed prior to 2008. This engine is subject to NESHAP 40 CFR Part 63 Subpart ZZZZ. The facility is compliant with the NESHAP for this engine as compliance is demonstrated through compliance with NSPS 40 CFR Part 60 Subpart IIII, which does not apply to this engine.

This facility does include cooling processes for production and storage of frozen food products. This cooling system is only used for a small portion of the products that are produced at this facility and appears to be small enough to meet PTI exemption Rule 280(2)(a).

Conclusion

At the conclusion of the inspection the facility appeared to be compliant with all permit requirements as well as all other applicable air quality rules and regulations.

NAME Scott Evans

DATE 1/10/2024

SUPERVISOR 