

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: Self Initiated Inspection

N210733015

FACILITY: SCHAFFER BAKERY DIVISION - Kalamazoo Plant		SRN / ID: N2107
LOCATION: 807 PALMER, KALAMAZOO		DISTRICT: Kalamazoo
CITY: KALAMAZOO		COUNTY: KALAMAZOO
CONTACT: Bob Reish, Plant Manager		ACTIVITY DATE: 01/13/2016
STAFF: Monica Brothers	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: Unannounced scheduled inspection		
RESOLVED COMPLAINTS:		

This was an unannounced scheduled inspection. Schaffer Bakery Division is a commercial bakery that makes a wide variety of Aunt Millie's buns and breads. They have two ovens, one for bun-baking, and the other strictly for bread loaf-baking. They also have one boiler, one emergency generator, and one cold cleaner, which are all exempt from permitting, along with the two ovens. They used to be regulated under 208a, until they proved they were a true minor in 2010. They currently have no permit but still report to MAERS for their VOC emissions.

Staff (Monica Brothers) arrived at Schaffer Bakery, also known as Aunt Millie's Bakeries at 9:55am. I met with Bob Reish, the plant manager, and Terry Sterner, the plant engineer, and gave them the inspection brochure and my business card. Bob took us to a conference room where I discussed with them the inspection procedures. Bob then called Dave Kent, the director of engineering for the bakery, so that he could be included by conference call on the discussion, since he was not at the facility that day. He is the only person who deals with and has access to the air quality records, so he asked me what I needed from him and told me that he would email those required documents to me by the end of the day. I then proceeded to ask Bob and Terry some questions about the bakery. They currently have 110 employees, and they run 24 hours per day, 6 days per week, with Friday being the day they are down.

Facility Tour:

During the facility tour, Bob walked me through the bread and bun-making process. We stopped at the following equipment and gathered these observations.

1. Bun Oven

- a. Manufacturer: Baker-Perkins
- b. Model: 935 Natural Gas-Fired Tray Oven
- c. Serial Number: 1855-03-004
- d. 8.5 hp
- e. Holds 38 Trays
- f. 4.9 MMBTU/hr
- g. Exempt from permitting under Rule 282(a)(v)
- h. During the inspection, they were baking hamburger buns in the bun oven. The oven temperatures ranged from 450-463 degrees F, depending on the different sections of the oven, and the bake time was 8 minutes. Bob told me that he believes the bun oven was installed in 1990.

2. Bread Oven

- a. Manufacturer: Baker-Perkins (Natural Gas-Fired Tray Oven)
- b. Serial Number: 56573
- c. 7.5hp
- d. Holds 43 Trays
- e. 4.6 MMBTU/hr
- f. Exempt from permitting under Rule 282(a)(v)
- g. During the inspection, they were baking cinnamon raisin bread in the bread oven. The oven temperatures ranged from 350-387 degrees F, depending on the different sections of the oven, and the bake time was 23.5 minutes.

3. Boiler

- a. Manufacturer: Johnston Brothers
- b. Fuel Type: Natural Gas
- c. Serial Number: H2690
- d. Cat. Number: 298-150C

- e. Manufacture Date: 1969
 - f. 1.9 MMBTU/hr
 - g. Exempt under Rule 282(b)(i)
 - h. During the inspection, the boiler was running at about 11psi.
4. Rooftop Stacks
- a. Bob and Terry showed me to the area where we could access the roof and take a look at the stacks. There was a fairly fresh layer of snow on the roof, and no particulate matter or staining was seen near the stacks. There were also no visible emissions from the stacks themselves.
5. Cold Cleaner
- a. Uses Crystal Clean 106 Mineral Spirits. An MSDS was obtained.
 - b. Exempt under Rule 281(h) and Rule 285(r)(iv)
 - c. The lid was closed during the inspection
 - d. Instructions were posted on the inside lid of the cold cleaner, so I gave them an extra one to post on the wall or outside of the lid as well.
6. Emergency Generator
- a. Manufacturer: Cummins-Bridgeway
 - b. 500 KW
 - c. Fuel: Diesel
 - d. Bob believes it was installed in 1991
 - e. Hour meter read 677.9 hours
 - f. Exempt under Rule 285(g)

Following the tour, I thanked Bob and Terry for their time and left the facility at 11:10am.

Recordkeeping:

As promised by Dave Kent, I received all of the recordkeeping requirements later the same day as the inspection. The documents quantify the amount of VOCs in tons per year for each product they make in both ovens. They are using the AP 42 Section 9.9.6 bread-baking formula to determine their VOC emissions. For 2015, the bun oven emitted 11.42 tons of VOC per year, and the bread oven emitted 10.70 tons per year. This brings their facility total to 22.12 tons/year.

Mr. Kent also submitted the facility's natural gas usage totals for the two ovens and the boiler. For 2015, the bun oven used 12.65 MMCF, the bread oven used 7.99 MMCF, and the boiler used 10.53 MMCF, making the facility-wide total 31.17 MMCF. These numbers are used in MAERS to calculate the Ammonia, CO, NOx, PM, SO2, and VOC emissions from burning natural gas in the boiler, and the NOx, SO2, and VOC emissions from burning natural gas in the two ovens. According to their 2014 MAERS, these emissions were well under the limit for compliance, and since their production has not changed significantly in 2015, these numbers are expected to be similarly compliant for 2015. This will be checked upon their 2015 MAERS report submittal.

According to the facility tour and the record-keeping review, Shafer Bakery Division was in compliance at the time of this inspection.

NAME Marianne Boudreau

DATE 1/20/16

SUPERVISOR MB 1/25/2016