

N8040
MauriceDEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: Scheduled Inspection

N804029999

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| FACILITY: AUNT MILLIE'S BAKERIES, PLYMOUTH | | SRN / ID: N8040 |
| LOCATION: 45789 PORT ST, PLYMOUTH | | DISTRICT: Detroit |
| CITY: PLYMOUTH | | COUNTY: WAYNE |
| CONTACT: Larry Christie | | ACTIVITY DATE: 06/26/2015 |
| STAFF: Jill Zimmerman | COMPLIANCE STATUS: Compliance | SOURCE CLASS: SM 208A |
| SUBJECT: Target Inspection | | |
| RESOLVED COMPLAINTS: | | |

DATE OF INSPECTION : 06/26/2015

TIME OF INSPECTION : 11:00 am

LEVEL OF INSPECTION : II

NAICS CODE : 311812

EPA POLLUTANT CLASS : CO, CO₂, NO_x, VOC

INSPECTED BY : Jill Zimmerman

PERSONNEL PRESENT : Andrew Baker, Assistant Plant Manager
Larry Christy

FACILITY PHONE NUMBER : 734-354-9520

FACILITY FAX NUMBER : 734-354-9510

FACILITY BACKGROUND

Aunt Millie's Bakeries began operation at the Plymouth Michigan facility on 5/1/2005. The facility is bordered by Five Mile Road to the north, Sheldon Road to the east, M-14 Highway to the south and Beck Road to the west. The facility operates 3 shifts per day, seven days per week, running both the bread line and the bun line based on demand.

At this location of Aunt Millie's Bakery, buns are made for grocery stores under the Aunt Millie name as well as for most fast food chains. Loaves of bread are also made on a second line that was added about 4 years ago.

COMPLAINT/COMPLIANCE HISTORY

No complaints have been received regarding this facility. During past inspections, no areas of noncompliance have been discovered.

OUTSTANDING VNs

No Violation Notices (VN) have been issued regarding this facility.

PROCESS EQUIPMENT AND CONTROLS

Raw materials are brought in and stored on racks in the basement of the facility. There is an elevator near the rear of the facility that is used to move the raw materials. In the basement there are also six 750 gallon storage tanks in a temperature controlled room. There are four tanks holding corn syrup and two tanks holding liquid shortening. There are 2 boilers used for heating the proofing boxes and there are 2 ovens, one for each bread line. All hilos and other vehicles at the plant are electric.

There are two nearly identical process lines; the bread line, which produces loaves of bread and the bun line, which produces buns. The process begins when the flour enters a shifter. Next, water and yeast are added to the flour; the mixture is called sponge. The sponge is allowed to rise for about 4 hours. There is one sponge mixer for the bun line and there are two sponge mixers for the bread line. Then, the shortening is added and the mixture is placed in a bin. There is one mixer bin for the bread line and one mixer bin for the bun line. From there it enters a pipe and moves to a hopper, where it passes through an extruder. The dough balls then pass through flour so that they do not stick and are placed in a pan to be shaped properly as either buns or loaves of bread. The dough enters the proof box, where it rises again, as heat and humidity is added at a temperature of about 130 F.

After rising for about an hour, the dough is transported to one of two ovens. Along this path, seeds are added to the product as needed. The dough moves on a conveyor and is unloaded on the bottom. The product bakes in the natural gas fired oven at approximately 440 F. The baking time varies based on the product. Using a vacuum process, the bread or buns are de-panned, and all crumbs are sucked away. A robot arm puts the pans away after the bread or buns are removed. The bread or buns travel on a conveyor system for to cool. Again the cooling time varies based on the product. During this time, the bread or buns pass through two metal detectors and then move to the packaging area. The bread or buns pass through a slicer and are manually checked for quality control. A puff of air is blown into the bags to open them. Then the buns enter the bag. The sell by date is printed on the bag, a metal twist tie is mechanically added, and the buns are placed on pallets to be shipped to the stores. Generally, the process for baking buns from dough to final product is about 1.5 hours and the process for baking loaves of bread from dough to final product is about 2.5 hours.

INSPECTION NARRATIVE

I arrived at 11:00 am to begin this unannounced inspection. Fresh baked bread odors were detected inside the facility. I met with Mr. Andrew Baker, Assistant Plant Manager and Mr. Christi who gave me a detailed tour of the facility, explaining the process. Currently the facility produces more than twenty varieties of bread and buns for both consumer and commercial purchase. During the inspection, the facility was producing sesame seed buns for a fast food restaurant. The bread line was not operating during the inspection; this line was being cleaned. Typically, the bread line is down for about 24 hours a week because of demand. During the inspection the bread line was down for about 12 hours. Whenever a line is shut down for more than 12 hours, the line is wet cleaned. Otherwise, the lines are spot cleaned as needed.

APPLICABLE RULES/PERMIT CONDITIONS

This facility operates two ovens used to bake food for human consumption. These ovens are exempt from permitting by Rule 282 (a)(v). Based on what the facility has reported in MAERS, the oven for the bun line operates at 4.92 MMBTU and the oven for the bread line operates at 7.29 MMBTU. The facility also operates two boilers, which operate on natural gas. The natural gas fired boilers are 7.29 MMBTU and 1.260 MMBTU, and are therefore exempt from permitting based on Rule 282 (b)(i).

Currently this facility is operating as a synthetic minor source because of Rule 208a. The registration for this requirement was received on March 16, 2015. During 2014 the facility reported the following emissions:

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| CO | 0.7035 tons |
| NOx | 3.19 tons |
| PM ₁₀ | 0.064 ton |
| PM _{2.5} | 0.064 tons |
| SO ₂ | 0.015 tons |
| VOC | 3.90 tons |

For a facility to meet the requirements for Rule 208a, they must emit less than 50% of the major threshold limits, which for these pollutants is 50 tons per year. These emissions meet the requirements for the facility to operate under Rule 208a.

MAERS REPORT REVIEW

The MAERS for reporting year 2014 was received on February 26, 2015 and was audited on May 28, 2015. The report appeared to have been completed accurately and no errors were discovered.

FINAL COMPLIANCE DETERMINATION

This facility appears to be in compliance with all applicable state and federal rules.

NAME

Joe Zimmerman

DATE

7/2/15

SUPERVISOR

JK