N8040
MANILA

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: Scheduled Inspection

N804035031

FACILITY: AUNT MILLIE'S BAKERIES, PLYMOUTH		**SRN / ID:** N8040
LOCATION: 45789 PORT ST, PLYMOUTH		**DISTRICT:** Detroit
CITY: PLYMOUTH		**COUNTY:** WAYNE
CONTACT: Jaeseung (Jay) Whiting , Plant Manager		**ACTIVITY DATE:** 06/17/2016
STAFF: Jill Zimmerman	**COMPLIANCE STATUS:** Compliance	**SOURCE CLASS:** SM 208A
SUBJECT: Target Inspection		
RESOLVED COMPLAINTS:		

DATE OF INSPECTION	:	06/17/2016
TIME OF INSPECTION	:	9:30 am
LEVEL OF INSPECTION	:	II
NAICS CODE	:	311812
EPA POLLUTANT CLASS	:	CO, CO_2, NO_X, VOC
INSPECTED BY	:	Jill Zimmerman
PERSONNEL PRESENT	:	Jaeseung (Jay) Whiting, Plant Manager Bill Martin, Engineer
FACILITY PHONE NUMBER	:	734-354-9520
EMAIL	:	JWhiting@AuntMillies.com

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, six 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 six 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; this 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, sesame 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 pulls 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 or bread loaves 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 9:30 am to begin this unannounced inspection. Fresh baked bread odors were detected inside the facility. I met with Jaeseung (Jay) Whiting, Plant Manager and Mr. Bill Martin, Engineer. Initially, we discussed the process at the facility. I also explained that the facility was operating under Rule 208A, which limits the emissions so that the facility would be considered a synthetic minor source. Next Mr. Whiting and Mr. Martin gave me a detailed tour of the facility, explaining the process. The facility was on a weekly shut down, where the line is cleaned and any maintenance needed on the line is performed. 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 appears to have a potential to emit (PTE) greater than the threshold for a true minor source. This facility has chosen to operate with the emission limiting rule of 208A. Rule 208A is in the process of being rescinded. I explained to the company that they will need to have an opt-out permit in place before the rule is rescinded. Mr. Martin said that he was aware that Mr. David Kent was in the process of completing the permit application. Mr. Martin said that he would be contacting Mr. Kent directly after my inspection to determine where Mr. Kent was in the permitting process.

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 the information tag, 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 February 16, 2016. During 2015 the facility reported the following emissions:

CO	0.7035 tons

NOx	3.32 tons
PM_{10}	0.064 tons
$PM_{2.5}$	0.064 tons
SO_2	0.016 tons
VOC	49.12 tons

For a facility to meet the requirements for Rule 208a, they must emit less than 50% of the major threshold limits. All of these values reported in MAERS are below this limit. VOC emissions are to be limited to less than 50 tons per year, and the facility is meeting this limit based on these reported values. These emissions meet the requirements for the facility to operate under Rule 208a.

The largest source of VOC emissions come from the bread line and the bun line. During 2015, The bun line emitted 22.8 tons VOC and the bread line emitted 26.33 tons.

MAERS REPORT REVIEW

The MAERS for reporting year 2015 was received on February 8, 2016 and was audited on March 4, 2016. The report appeared to have been completed accurately and no errors were discovered.

On February 23, 2016 after reviewing the MAERS, I contacted Mr. David Kent and Mr. John Popp to explain the facility's option when Rule 208A is rescinded. Mr. Popp's email was returned as unbelievable, so I then emailed Ms. Robin McCallum, who was also listed as a contact through MAERS. Mr. Kent responded that he would be working on a permit application for all of the Aunt Millie's facilities located in Michigan. On Friday June 17, 2016 Mr. Kent emailed me after my inspection to ensure that I had received all necessary information. I again explained to Mr. Kent that this facility would need to obtain a permit before Rule 208A is rescinded.

FINAL COMPLIANCE DETERMINATION

This facility appears to be in compliance with all applicable state and federal rules at the time of this inspection. The facility has been informed multiple times about Rule 208a being rescinded. The facility has stated that they are in the process of applying for an Opt-Out permit. At the time that this report was written, no permit application has been received.

NAME _____ DATE 7/22/16 SUPERVISOR JK