N8040 MANILA

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

N804037374

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: 10/27/2016	
STAFF: Jill Zimmerman	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM 208A	
SUBJECT: Target Inspeciton			
RESOLVED COMPLAINTS:			

DATE OF INSPECTION TIME OF INSPECTION

10/27/2016 10:15 am

LEVEL OF INSPECTION

- 11

NAICS CODE

311812

EPA POLLUTANT CLASS

CO, CO₂, 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.

PERSONAL PROTECTION EQUIPMENT

During this onsite inspection, I wore steel toed shoes and safety glasses. I was given a hairnet from the company to be worn while walking through the facility. Also, I was asked not to wear any jewelry with stones to ensure that no foreign objects could fall into the dough. No gum chewing is allowed on the plant floor as well.

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 baking 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 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 product enters 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 customer. 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 10:15 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 Martyn, 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. Martyn gave me a detailed tour of the facility, explaining the process. During the onsite inspection, the bread line was producing white loaves of bread and the bun line was producing hamburger buns. While walking through the process, I verified that both boilers operate on natural gas. The identification card on boiler 1 was 2.05 MMBTU / hr and on boiler 2 was 1.260 MBTU / hr, which is consistent with the information submitted through MAERS. Both ovens operate on natural gas. The identification card on the bread oven was 7.29 MMBTU / hr and on the bun oven as 4.92 MMBTU / hr, which is consistent with the information submitted through MAERS.

After walking through and observing the baking lines, we met to discuss the permitting status of this facility. Currently, the facility is operating as synthetic minor by meeting the requirements of Rule 208a. Rule 208a is in the process of being rescinded, at which time this facility will need to either obtain a Title V permit, an opt-out permit or verify through potential to emit calculations that this facility is operating as a true minor facility. Mr. Martyn and Mr. Whiting explained that Mr. David Kent was responsible for environmental compliance. During this meeting, Mr. Kent was called to give an update on the permitting status of this facility. Mr. Kent stated that he thought that he did not have to make any changes since the facility was operating under a rule that limited the emissions. I explained that this was Rule 208a and that this rule was being rescinded. I explained that the facility would need to obtain either a Title V permit or an Opt-out permit. I also explained that the facility would be operating out of compliance if they did not obtain one of these permit options. I explained that most likely the facility would need an opt-out permit to maintain a synthetic minor status. Mr. Kent asked if I would email him information on the permitting process so that he could begin the permitting process. A copy of this

email is attached to this report.

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. A phone conversation with Mr. Kent occurred during this onsite inspection. Mr. Kent stated that he would begin 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 (22.78 tons in the Bun Oven and 26.3 tons in the Bread Oven)

For a facility to meet the requirements for Rule 208a, they must emit less than 50% of the major threshold limits for a Title V major source. 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.

I have attached an email conversation as well as potential to emit (PTE) calculations that were submitted by the facility. The result of these calculations and emails was that the company will need to apply for a synthetic minor source to opt out of the Title V program.

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 previous 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 their options to maintain operating in

compliance when Rule 208a is rescinde	d. The facility has stat	ed that they ar	e in the proces	ss of
applying for an Opt-Out permit. At the tir	ne that this report was	s written, no pe	rmit applicatio	n has been
eceived.				
JAME SIPCZIMMENTON	DATE 1117/16	SUPERVISOR	JK	

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