

Manila  
Cody ✓

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

N592942736

|                                       |                               |                           |
|---------------------------------------|-------------------------------|---------------------------|
| FACILITY: LOTTE USA INC               |                               | SRN / ID: N5929           |
| LOCATION: 5243 WAYNE RD, BATTLE CREEK |                               | DISTRICT: Kalamazoo       |
| CITY: BATTLE CREEK                    |                               | COUNTY: CALHOUN           |
| CONTACT: Jeff Hall , Supervisor       |                               | ACTIVITY DATE: 12/12/2017 |
| STAFF: Rex Lane                       | COMPLIANCE STATUS: Compliance | SOURCE CLASS:             |
| SUBJECT: Self Initiated Inspection    |                               |                           |
| RESOLVED COMPLAINTS:                  |                               |                           |

On December 12, 2017, Air Quality Division (AQD) staff (Rex Lane and Cody Yazzie) arrived at Lotte USA, Inc. located at 5243 Wayne Road, Battle Creek, Michigan at 1:30 pm to conduct an unannounced air quality inspection. Staff dialed the lobby phone for assistance and an office assistant came out and staff provided her with a business card and stated the purpose of the visit. Staff noted on the sign in registry that MDARD food inspectors had been at the facility in the morning and Mr. Jeff Hall, Supervisor arrived shortly thereafter.

The facility was last inspected by the AQD on 10/30/07 and was determined to be compliant at that time. The facility commenced operations in 1979 and manufactures unflavored chewing gum base from liquid wax and one of two types of polyisobutylene rubber materials in Plant 1. The unflavored chewing gum base product is exported primarily to southeast Asian countries. The facility used to make cookies in Plant 2, but this operation shut down just prior to the 2007 inspection and remains closed. The facility now imports cookies and Plant 1 is the distribution center for the U.S. market. Plant 1 operates one 8-hour shift per day Monday through Friday.

Mr. Hall gave staff a tour of the facility and the only required personal equipment is a hair net. Staff observations and comments are summarized below:

The facility has two electric mixers where the heated liquid wax (i.e. Parafflex) and polyisobutylene rubber (i.e. Oppanol B) are blended together and then discharged into stainless steel trays to cool and harden. Once the gum cools and hardens it is packaged and shipped overseas. SDS data for the liquid wax and two types of rubber products used in the mixers is attached to this activity report.

The liquid wax is stored in two indoor silos that each have a storage capacity of 44,000 pounds. The silos are double-walled and steam jacketing maintains the wax at approximately 230 degrees F. Mr. Hall stated that the wax will solidify < 205 degrees F. The wax storage silos are exempt from air use permitting requirements under Rule 284(2)(a).

A liquid nitrogen tank is located outside the south wall of Plant 1. A nitrogen blanket is maintained in the electric mixers during use to prevent oxidation of the gum materials and to prevent flammable conditions. The liquid nitrogen tank is exempt from air use permitting requirements per Rule 284(2)(j).

The facility has two identical Cleaver Brooks Model No. CB200-150 steam boilers that were installed in 1979. The boilers are natural gas fired only and are each rated at 6.277 MMBtu/hour. Per Mr. Hall, only one boiler is run at a time and boiler operation is rotated every six months. The boilers are operated at about 50 psi steam load and provide heat to the wax silos, wax distribution lines and to the electric mixers. The boilers are inspected on an annual basis as required by the facility's insurance company. The boilers are also registered with the State of Michigan (State IDs M329937M and M329936M) and were inspected by the Department of Labor and Economic Growth on 7/27/17 and 8/3/17. The boilers are exempt from air use permitting requirements under Rule 282(2)(b)(i).

Staff thanked Mr. Hall for his time and cooperation and left the facility at 2:30 pm. All described process equipment is exempt from air use permitting. The facility appears to be in compliance with applicable State and Federal air quality regulations. -RIL

NAME RILDATE 12/20/17SUPERVISOR YMA 12/20/2017