

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

B716435332

FACILITY: PEPSI COLA BOTTLING GROUP		SRN / ID: B7164
LOCATION: 725 MCPHERSON PARK DR, HOWELL		DISTRICT: Lansing
CITY: HOWELL		COUNTY: LIVINGSTON
CONTACT: Orlando McDonald, Enviro		ACTIVITY DATE: 06/28/2016
STAFF: Nathaniel Hude	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: Scheduled, yet unannounced initial inspection as facility inspector.		
RESOLVED COMPLAINTS:		

Inspection Report

B7164- Pepsi

755 S. McPherson Park Drive
Howell, MI 48843

Inspection Date:

6/28/16

Facility Contacts:

Orlando McDonald, Environmental, Orlando.mcdonald@pepsico.com
Robert Herman, Plant Director, Robert.hermann@pepsico.com
Clifford Merritt, Plant Manager, Clifford.merritt@pepsico.com

MDEQ AQD Personnel:Nathan Hude -- HUDEN@michigan.gov, 517-284-6779**Facility Description:**

Pepsi manufacturing and bottling plant for Category 1 (carbonated) beverages. The entire facility employs approx. 400 people and manufactures soda 20 hrs. per day, 6 days per week. Though the plant is open 24 hrs. per day all 6 days (Mon-Sat).

Equipment for entry includes high visibility vest, safety glasses, hearing protection, steel toed shoes. Hair and beard nets are required for production areas and are provided when needed.

Applicable Regulations:

-no permits

Voided Permits:

-PTI 517-87 voided due to removal of packaging paint line

Previous Inspections (within 5 years):

Ken Damrel, 11/24/09, no issues

Previous Violations:

none

Violations Found During this Inspection including reoccurring:

none

Recent Complaints (within 2 years):

none

MAERS Reporting

na

MAERS Emission Unit List

none

Inspection Summary

I arrived at Pepsi around 10:30 am for a scheduled, unannounced, initial contact (as inspector) inspection. It was overcast with light winds out of the North West; upon entering the parking lot and the building, I did not detect any odors or see any visible emissions.

I signed in at the front entrance and Orlando, Clifford, and Robert met me shortly thereafter. I informed them all on the reason for my visit while providing them our inspection brochure, the boiler card, and each with my business card. We reviewed the brochure in the lobby area and shortly thereafter toured the plant floor.

When you enter the facility floor, there are signs for anhydrous ammonia (AA). The AA is used in a closed loop refrigeration device (dolphin system) that cools the soda before bottling. There are 2 tanks on site, each with the capacity of 3250 lbs each (or about 637 gallons using 5.1lbs/gal). Based on permit standards set by the state, all AA tanks require permitting if over 500 lbs; though we have commonly not included AA refrigeration devices in the past. More research will need to be completed regarding the storage of AA at this site to determine if permitting is required. Though with the storage of greater than 500 lbs, the Local Emergency Planning Committee (LEPC) an MI SARA Title III program must be notified.

There are also 2 boilers onsite used for process heating. The boilers are natural gas fueled and are 6.3 MMBtu max with the capability of 5175 lbs/hr of steam. These boilers are not subject to 40CFR63 5D due to not being a major source and not subject to 40CFR63 6J due to being exempt as a natural gas boiler per paragraph 63.11196(e).

The process of making the soda involves mixing water with syrup. The water is from the local municipal system, but is ran through a reverse osmosis system to remove chlorine or other additives. The facility has five lines, 1 can, 1 bag in box for fountain drinks, and 3 bottle lines.

Once properly mixed, the soda is poured into already shaped and printed cans, already molded bottles, or bottles that are "blown" on site. The bottles that are blown onsite are received as a plastic test tube with threads. The tube is heated up and air blows into the neck expanding the plastic to the desired shape. A label is then applied to the bottle with a small amount of adhesive. I requested that the adhesive MSDS be provided along with the usage rate (order invoices) so that if any VOC's are emitted an estimated amount can be attained. Robert stated that the output is 31 million cases of pop per year, and between 450,000 to 750,000 cases per week.

We then went outside towards the fleet maintenance shop area. On the way we passed one of two CO2 tanks used for carbonation. One tank is 25,000 gallons and the other is 50,000 gallons; it is estimated that both tanks are filled 2-3 times per week. The fleet shop is where the delivery semi-trucks are maintained. The shop recycles the oil generated and has no fuel storage tanks. Near the fleet shop is the microbiology plant. This plant treats waste water prior to being discharged to the municipal sewer system for biochemical oxygen demand (BOD), chemical oxygen demand (COD), and pH.

I confirmed the paint line was indeed shut down and no longer installed as the previous inspection report noted. I departed the site at approx. 11:30am. I explained that the MSDS and usage for the adhesive could be emailed to me so they would have time to gather the information. I also informed them that I would research the AA permit requirements and inform them on what I found.

I did not inquire on if the site had emergency generators installed prior to leaving. This inquiry was done via email the afternoon of the inspection. The following was included in the email sent to all three individuals:

Gentlemen,

Thank you for your hospitality and the tour of your facility today. I just wanted to email to follow-up on certain items we discussed during the inspection or during our out brief and one thing I forgot to ask about.

1. Does your facility have any emergency generators for power outages?
2. Your boilers are exempt (have no compliance requirements) with the federal regulations referred to on the card I provided you. The tool referenced can be found at:
<http://www.deq.state.mi.us/eforms/BoilerTool/quiz.html>
The paragraph that explains the exemption is 63.11196(e) referring to a boiler that fires natural gas.
3. The anhydrous ammonia storage. Due to storage amounts exceeding 500 lbs, you may have to provide notification to the Local Emergency Planning Committee (LEPC) and reporting to the MI SARA Title III program. Do you know if this is being done or has been completed?
 - a. Here is an informative link for anhydrous ammonia information (though this is more for farming operations): http://www.michigan.gov/documents/deq/deq-oea-aqd-brochure-Anhydrous_Ammonia_Fertilizer_492094_7.pdf

- b. I am still researching the need of a permit for anhydrous ammonia used as a refrigerant. I will get back with you on this asap.
4. When you get the opportunity, please provide the following:
 - a. Bottle label adhesive MSDS which includes the VOC content in % or pounds/gallon.
 - b. Usage rate of adhesive in daily maximum or annual usage.

The response to my email sent on 6/28/16 was received on 6/29/16 the following day. Orlando provided me with all of the information requested.

For the engines, Orlando sent me the Technical Data Sheets (TDS) for both. Both are manufactured by Kohler though one is diesel and one is natural gas. Both engines have a construction date of October 2007

The Kohler diesel (compression ignition or CI) is model# 50REOZJB, with a max of 50kW dependent on the generator, 110 BHp, 8 cylinder, and 8.1 liters (or 1 liter / cylinder). According to the EPA RICE quiz, this engine is considered the following "New & Reconstructed Stationary Engine ≤500 HP Located at Area Source of HAP Emergency On or After 6/12/2006" and is subject to 40CFR60 IIII or 40CFR60 JJJJ. Utilizing the EPA ICE quiz, I identified the engine as "Commenced construction after July 11, 2005 and manufactured after April 1, 2006", "Pre-2007 model year emergency CI ICE <10l/cyl" and found the engine to have 40CFR60 IIII requirements.

The Kohler natural gas (spark ignition or SI) engine is model# 150RZGB, with a max of 170 kW, 228 BHp, 4 cylinder, and 4.5 liters (or 1.1 liter / cylinder). According to the EPA RICE quiz, this engine is considered the following "New & Reconstructed Stationary Engine ≤500 HP Located at Area Source of HAP Emergency On or After 6/12/2006" and is subject to 40CFR60 IIII or 40CFR60 JJJJ. Utilizing the EPA ICE quiz, I identified the engine as "Emergency Engine greater than 25 HP" and found the engine to have 40CFR60 JJJJ requirements.

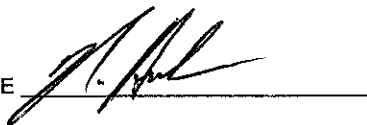
Email notifications of the compliance requirements for both regulations were sent to Orlando via email on 7/6/16. This notification will require Pepsi to research the requirements of the regulations and determine a course of action for compliance. A violation will not be sent for the lack of past compliance at this point. Should further delays to compliance occur a violation will be given. I requested that they look into this and determine what compliance requirements apply and devise a course of action on how compliance will be achieved NLT July 27, 2016.

As far as the anhydrous ammonia tanks, Tier II and MI SARA reporting is conducted and the LEPC and local fire department are knowledgeable of the hazard posed per Orlando.

The MSDS sheets were provided (and are attached). There are two products used to seal the labels; KRONES colfix HM 8032 at a usage rate of 5 lbs/day or 0.63 gallons/day (density at 0.95 g/ml or 7.93 lbs/gal) and Technomelt EM 377 with a usage rate of 2.5 lbs/day or 0.31 gallons/day (density of 8.13 lbs/gal). This application rate fits the requirements of exemption 287(a) of less than 2 gallons a day and released into the in plant environment. The VOC content in both products is identified as negligible; even so at the current usage rate, the emissions would be well under emission concerns (using product used; 7.5lbs/day * 356 day/yr = 2738lbs/yr or 1.4tpy).

Further information regarding the applicability of regulations to engines will be written as a "Reg. Applicability Determination" report.

NAME



DATE

7/6/16

SUPERVISOR

