

**DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: On-site Inspection**

P131064451

FACILITY: KENT QUALITY FOODS		SRN / ID: P1310
LOCATION: 3426 QUINCY STREET, HUDSONVILLE		DISTRICT: Grand Rapids
CITY: HUDSONVILLE		COUNTY: OTTAWA
CONTACT: Greg Rozycki , Environmental Health and Safety Manager		ACTIVITY DATE: 09/06/2022
STAFF: Chris Robinson	COMPLIANCE STATUS: Non Compliance	SOURCE CLASS: Minor
SUBJECT: FY 22 inspection to determine compliance with applicable air quality rules and regulations.		
RESOLVED COMPLAINTS:		

I – Introduction

Chris Robinson (CR) from the Department of Environment, Great Lakes, and Energy’s (EGLE) Air Quality Division (AQD) was on site to conduct an inspection of Kent Quality Foods (SRN P1310) on September 6, 2022. The facility is located at 3426 Quincy Street in Hudsonville, Ottawa County, Michigan. Prior to entry CR surveyed the perimeter of the facility for odors and visible emissions. None were observed. Weather conditions were mostly cloudy with a temperature of approximately 74°F and south-southeast winds at 5 mph (www.weatherunderground.com).

CR met with Shane Dood, Maintenance Manager informing him of the purpose of the visit which was to conduct an inspection to determine compliance status with respect to applicable air quality rules and regulations.

II - Facility Description

Kent Quality Foods is a food processing company of hot dogs and sausage products that utilizes, amongst other equipment, natural gas fired ovens, woodchip smokers and liquid smoke drench tanks. The company operates 24 hours a day, seven days a week.

III - Compliance Evaluation

There are no active permits for this facility. The onsite processes are split into three sections which are the raw meat area, the cooked meat area, and packaging. In the raw meat area, meat is brought on site and goes through various grinding and mixing processes before being sent to the ovens where it is cooked/smoked. Once the meat is cooked/smoked it goes through several additional processes such as quality checking and removal of casings from products before being packaged and shipped off site for consumption.

The facility uses 12 natural gas fired ovens equipped with Maxon 425 Burner packs with a rating of 2.5 MMBTUs for cooking meat. Liquid smoke is applied by use of a drench tank prior to cooking. Smoke created from combusting woodchips is created in a smoke generator which is directed into the ovens during the cooking process. The ovens are not equipped with afterburners. The facility tracks usage of both liquid smoke and woodchips and calculates monthly emissions to determine compliance with the 1,000 lb. per month emission limit specified in Rule 290(2)(a)(i). Since none of the ovens use a control device both Particulate Matter (PM) Emissions and emissions of Volatile Organic Compounds (VOCs) must be combined. Records for 2021 and 2022, through August, were provided and are attached. The month with the highest emissions of VOC/PM was April 2022 at 353.08 pounds (160.16 lbs. VOCs & 192.92 lbs. PM) However, in order to use Rule 290 a screening level analysis must be conducted in order to determine if Rule 290 is feasible and which emission limit applies (1,000 lb./month or 20 lb./month). Rule 290(2)(a)(i) only applies to noncarcinogenic VOCs. Per AP-42 9.5.2, which is being used by the facility to determine emission factors, pollutants

associated to smokehouses include PM, carbon monoxide (CO), VOCs, polycyclic aromatic hydrocarbons (PAH), organic acids, acrolein, acetaldehyde, formaldehyde, and nitrogen oxides.

Both acetaldehyde and formaldehyde are listed as being carcinogens, therefore Rule 290(2)(a)(i) would not work for these pollutants. However, Rule 290(2)(a)(ii)(A-C) may be applicable but the facility must complete the evaluation to determine this. Kent Quality foods is being requested to re-evaluate the meat smoking process, both liquid and with woodchips, for Rule 290 applicability and provide a complete demonstration to the AQD.

The facility has a cold storage system that utilizes anhydrous ammonia. Per Mr. Dood the system holds just over 10,000 pounds of anhydrous ammonia, which equates to approximately 2,000 gallons of ammonia.

2 gallons ammonia = ~10 pounds
 $(10,000 / 10) * 2 = 2000$ gallons

Rule 280(2)(a) exempts cold storage refrigeration equipment and storage of the refrigerant from having to be permitted as long as the anhydrous ammonia storage capacity is less than 500 gallons. Therefore, the cold storage system used at Kent Quality Foods is not exempt from Rule 201 permitting requirements. The installation and operation of this equipment without a Permit to Install is considered a Rule 201 violation.

Other Rule 201 permitting exemptions being claimed:

1. 2 natural gas-fired only 1,678,000 Btu/hr. Cleaver Brooks steam generating boilers that appear to be exempt per Rule 282(2)(b) since they are rated at less than 50,000,000 Btus/hr. and combust only sweet natural gas.
2. 3 natural gas-fired only 1,920,000 Btu/hr. hot water heaters that appear to be exempt per Rule 282(2)(b) since they are rated at less than 50,000,000 Btus/hr. and combust only sweet natural gas.
3. The Maintenance department utilizes various equipment for cutting, drilling, and grinding metal which appears exempt per Rule 285(l)(vi)(C) for metal cutting operations where emissions are only released to the in-plant environment.
4. Portable welders used by maintenance, which appear to be exempt per Rule 285(2)(j).

IV - Compliance Determination

Based on the observations and discussions during the inspection Kent Quality Foods is not operating in compliance with applicable air quality rules and regulations. Specifically, the installation and operation of an anhydrous ammonia refrigeration system with a capacity greater than 500 gallons without a Permit to Install is considered a Rule 201 violation. A violation Notice will be issued along with a request for a complete exemption demonstration for the meat cooking/smoking operations.

NAME


DATE 9/15/2022

SUPERVISOR

