

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

A580647801

FACILITY: The Hillshire Brands Company		SRN / ID: A5806
LOCATION: 8300 96TH AVE, ZEELAND		DISTRICT: Grand Rapids
CITY: ZEELAND		COUNTY: OTTAWA
CONTACT: Travis Williams ,		ACTIVITY DATE: 01/24/2019
STAFF: Tyler Salamasick	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: FY 2019 Opt out		
RESOLVED COMPLAINTS:		

Clean Air Act Inspection report for The Hillshire Brands Company, Hillshire, Zeeland, Michigan

Facility Background

The Hillshire Brands Company is a food producer. This facility specifically produces smoked meats, chicken, pork, beef and turkey products.

The Hillshire Brands Company is not subject to the Title V program, which is discussed below, in the regulatory analysis section of this report.

Compliance History

The facility has not received any violation notices in the past five years. The facility was last inspected in Fiscal Year 2015 and was found to be in compliance with the applicable air quality rules and regulations at that time.

Location

The Hillshire Brands Company located at 8300 96th Ave, Zeeland, Michigan. This area is primarily rural. The nearest residential structure is approximately 1000 feet to the southeast of the facility.

Recent Changes

Approximately 5 years ago the facility was acquired by Tyson Foods. The facility retained its name and still operates as The Hillshire Brands Company.

Introduction and purpose of inspection

On January 24, 2019 Tyler Salamasick, Environmental Quality Analyst of the Michigan Department of Environmental Quality, Air Quality Division conducted an unannounced, scheduled inspection of The Hillshire Brands Company. The MDEQ inspected the facility located at 8300 96th Ave, Zeeland, Michigan.

The purpose of the inspection was to determine the facility's compliance with the requirements of the federal Clean Air Act; Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451); the Air Pollution Control Rules; and PTI No 270-96C.

Observations and facility processes

AQD staff met with Kevin Allen, Area Environmental Manager, Travis Williams, Environmental Manager, and Paul Shultz, Environmental Manager. AQD staff presented their identification and informed the representative of the intent of the inspection. The facility representative agreed to show the AQD the facility and its processes. Paul Shultz is transitioning into the main environmental compliance role at this facility. Travis Williams was the previous contact and both Kevin and Travis are in the process of training Paul. The Hillshire Brands Company produces multiple different types of meat products. The facility's main products are deli meats, hotdog/franks, sausage patties/links, beef roasts and breakfast bowls. The facility's processes are described in some detail below.

During the inspection AQD staff observed the facility's processes and also made emissions observations on the roof. The facility has multiple production lines that use different combinations of meat cutting, spice blending, smoking, cooking with boiler heat, chilling and packaging. The main emission units at the facility are the natural gas boilers and the smoking ovens. The facility also has a large anhydrous ammonia refrigeration unit and small emergency generators.

I observed various cooking lines, some of which utilize in-bag wet cooking. The wet cooking process involves cooking meat in sealed bags with hot water. The equipment did not appear to generate significant emissions other than water vapor. The process uses the boilers to provide process heat. Other cooking lines involved the smoking ovens. The smoking lines used either liquid smoke flavoring, natural smoke or a combination of the two. This process also utilized process heat from the boilers. The main emissions from the ovens are from the smoke and smoke flavoring. The facility has an Opt-out permit No. 270-96C which establishes wood chip and liquid smoke limits. The permit also establishes facility wide nitrogen oxides (NOx), carbon monoxide (CO), and carbon dioxide equivalent (CO_{2e}) emission limits.

I observed three of the five main boilers at the facility. The three that I observed had the following btu/hr ratings and years. Boiler #1 and #2 are Cleaver Brooks 14.6 MMBtu/hr natural gas fired boilers from 4/29/66. The third boiler is a 20.9 MMBtu/hr natural gas fired boiler from 12/22/90.

Part way through the inspection Randy Fortman joined us on the inspection to provide additional details on how the processes work. While inspecting one of the exhaust points on the sausage line I observed a stack with what appeared to be staining coming down the outside seam of the stack. Travis Williams indicated that the stacks are regularly cleaned and that it could be the result of grease being blown up and out of the stack. He also indicated that some of the stacks were equipped with a downwash control system and backup absorbent pads.

After walking through the facility, I inspected the smoking oven stacks on the roof. The ovens appeared to be operating at that time. I observed combined water vapor emissions as well as faint cooking food odors and did not detect opacity. We also observed a stack from one of the sausage lines. One of the stacks observed had an absorbent pad at its base. Travis indicated that the pads are intended to prevent fire hazards if grease were to build up on the roof. There was fresh snow on the roof and I did not detect a significant amount of debris on it. I observed a few flakes of a tan material, which Kevin examined and claimed was slightly greasy. I indicated that if a significant amount of debris is present on the roof during future inspections it may be evident that excess emissions are coming from this process, and this is something that they should monitor. If the emissions are excessive, the process might require additional control in order to prevent the emission of particulate material.

Regulatory analysis and compliance evaluation

Facility emission category

The Hillshire Brands Company is an opt out source for nitrogen oxides (NOx), carbon monoxide (CO) and carbon dioxide equivalent (CO_{2e}). PTI No. 270-96C establishes a facility wide (FGFACILITY) for NOx at less than 70 tons per year (tpy), CO at less than 80 tpy and CO_{2e} at less than 89,000 tpy. The permit also establishes an aggregate HAP limit of 22.4 tons per year (tpy) and a single HAP limit of 8.9 tpy.

Federal Regulations

The facility has natural gas boilers that are subject to the NSPS Dc Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units. The facility maintains fuel usage records to demonstrate compliance with the NSPS.

Source Wide Conditions - Opt-out permit PTI-270-96C

The source wide conditions apply to all process equipment at the stationary source including equipment covered by other permits, grandfathered equipment and exempt equipment.

CO emissions are limited to 80 tpy based upon a 12-month rolling time period. Per the attached records, for the month of October 2018, CO emissions were 22.64 tpy per 12-month rolling time period. NOx emissions are limited to 70 tpy based upon a 12-month rolling time period. Per the attached records, as December 2018, NOx emissions were 25.6 tpy per 12-month rolling time period. CO2e emissions are limited to 89,000 tpy based upon a 12-month rolling time period. Per the attached records, as of July 2015, CO2e emissions were 29,204 tpy per 12-month rolling time period.

The facility also has source wide material limits. The permit establishes 12-month rolling limits on the use of natural gas, wood chips, CO2 gas and fuel oil. Respectively the natural gas use is limited to 1,300 MMcf based upon a 12-month rolling time period, wood chips are limited to 647.4 tpy based upon a 12-month rolling time period, the CO2 gas is limited to 10,000 tons per year based upon a 12-month rolling time period and the fuel oil is limited to 4,965 gallons per year based upon a 12-month rolling time period. The facility's records indicated that as of December 2018 the facility used 475.883 MMcf of the 1,300 MMcf natural gas limit (12 month rolling). The facility's records also indicated that in February 2015 the facility used 105 tpy of the 647.4 tpy wood chip limit (12 month rolling). The facility's records indicated that as of August 2015 the facility used 3607 tons of the 10,000 tpy CO2 gas limit (12 month rolling). The facility's records indicated that the highest 12 months rolling for fuel oil use was 546 gallons of the 4,965 gallon limit for the 12 month rolling time period in April of 2017.

The following conditions apply to the flexible group FGWOODSMOKEOVENS

Flexible group – FGWOODSMOKEOVENS -The flexible group includes the emission units EUALKAR4, EUALKAR5, EUALK-P2BATCH13, EUALK-P2BATCH14, EUAUR4, EUKSI-P2BATCH7, EUMAUR2, EUMAUR3 and EUMAUR5.

Material limits

The flexible group has a 647.4 tpy per 12 month rolling time period limit on wood chips use and a 510 tpy per 12 month rolling time period limit on liquid smoke use. The facility maintains a facility wide woodchip record which includes the use of wood chips in FGWOODSMOKEOVENS. The facility's highest use of wood chips in the past 5 years per a 12 month rolling time period was in February of 2015. The facility used 105 tons of the 647.4 ton limit. The facility's usage of liquid smoke ranges between approximately 6 and 10 tpy per 12 month rolling time period. The facility's highest use in the past 5 years was approximately 11 tpy per 12 month rolling of the 510 tpy limit.

Exempt processes

The facility maintains a list of the exempt emission units located within the facility (see attachment "Zeeland PTE Calculations 2018"). The facility's exempt units include multiple Rule 282 (2)(b)(i) for natural gas fired boilers and multiple Rule 290 exempt units. The exempt units also include Rule 281 (2)(h) exempt cold cleaners, Rule 287 (2)(c) exempt surface coating and Rule 285 (2)(g) internal combustion engines.


While reviewing the past 5 years of Rule 290 data it was observed that the facility reported 1010.43 lbs of emissions from the Frank Plant Ovens. This emission rate exceeds the 1000lb limit on all air contaminants emitted from a Rule 290 exempt unit. I contacted the facility and requested that they provide clarification on the

accuracy of the data. On 2/11/2019 Paul responded and indicated that the reported emissions totals were for 5 individual frank oven emission units. The total for all five was reported as one value, when in fact each emission unit meets the 1000 lb limit.

Discussion

Compliance statement: It appears that Hillshire Brands Company is in compliance with the requirements of the federal Clean Air Act; Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451); the Air Pollution Control Rules; and PTI No. 270-96C.

NAME



DATE

2/12/19

SUPERVISOR

