

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

B160145435

| | | |
|---|-------------------------------|---------------------------|
| FACILITY: Koegel Meats, Inc. | | SRN / ID: B1601 |
| LOCATION: 3400 West Bristol Road, FLINT | | DISTRICT: Lansing |
| CITY: FLINT | | COUNTY: GENESEE |
| CONTACT: James Lay , Plant Manager | | ACTIVITY DATE: 08/02/2018 |
| STAFF: Daniel McGeen | COMPLIANCE STATUS: Compliance | SOURCE CLASS: Minor |
| SUBJECT: Unannounced, scheduled inspection of facility last inspected by AQD prior to 2007. | | |
| RESOLVED COMPLAINTS: | | |

On 8/2/2018, the Michigan Department of Environmental Quality (DEQ), Air Quality Division (AQD), conducted an unannounced, scheduled inspection of Koegel Meats, Inc. (Koegel Meats), a facility which was last inspected by AQD prior to 2007.

Facility environmental contact:

James Lay, Plant Manager; 810-238-3685; jlay@koegelmeats.com

Facility description:

Koegel Meats Inc. is a Michigan-based producer of hot dogs, bologna, and other smoked meat products. Per their website, their products are sold primarily in Michigan, but also in Ohio.

Emission units, and compliance status with Michigan Air Pollution Control Rules:

- 2 natural gas-fired boilers, both 10,463,000 Btu/hr, 250 horsepower (hp) Sellers boilers; Rule 282(2)(b)(i) : compliance.
- Smoke houses 1-7; Rule 301, which limits opacity: compliance.
- Long house (smoke house); Rule 301, which limits opacity: compliance.
- Skinless house (smoke house); Rule 301, which limits opacity; compliance.
- 2 steam tunnels to shrink plastic packaging; not regulated by AQD.

Regulatory overview:

This facility is considered a minor source of criteria pollutants, that is, those pollutants for which a National Ambient Air Quality Standard (NAAQS) exist. These include carbon monoxide, nitrogen oxides, sulfur dioxide, volatile organic compounds (VOCs), lead, particulate matter smaller than 10 microns (PM10), and particulate matter smaller than 2.5 microns (PM2.5). A major source of criteria pollutants has the potential to emit (PTE) of 100 tons per year (TPY) or more of any one of the criteria pollutants, and would be subject to the Renewable Operating Permit program.

This facility is also considered to be a minor or area source for hazardous air Pollutants (HAPs), because it has a PTE of less than 10 TPY for any single HAP and less than 25 TPY for all HAPs combined.

The facility is not required to have a permit to install, but the following Michigan Air Pollution Control Rules are relevant to its operations:

- Rule 301 limits opacity, or density of visible emissions, to no more than 20% opacity over a 6-minute average, with the exception of one 6-minute average per hour not to exceed 27% opacity. This limit does not apply to visible emissions due to uncombined water vapor (steam).
- This facility boilers are considered exempt from the requirement of Michigan Air Pollution Control Rule 201 to obtain a permit to install. They are exempt because they meet the exemption criteria of Rule 282 (2)(b)(i) for fuel burning equipment used for service water heating or space heating which has a rated heat input capacity of less than 50,000,000 Btu/hr.

Because the two boilers are fired only by natural gas, they appear to be exempt from the requirements of the federal regulation 40 CFR Part 63, Subpart JJJJJJ, *National Emissions Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers, Area Sources*.

Fee status:

This facility is not considered a Category I fee-subject facility, because it is not a major source of criteria air pollutants. It is not considered a category II fee-subject source because it is neither a major source for hazardous air pollutants, nor is it subject to a federal New Source Performance Standard regulation. Lastly, it is not considered a Category III fee-subject facility, because it is not subject to a federal Maximum Achievable Control Technology standard. This facility is not required to submit an annual air emissions report via the Michigan Air Emissions Reporting System (MAERS), because it does not meet the criteria for reporting of having more than 10 TPY VOC emissions.

Location:

The plant is located on along Bristol Road, south of I-69, and east of the junction with US-23 and I-75. It is just north of Flint's Bishop International Airport. To the immediate north is the Canadian National railyard, followed by I-69, and then a commercial district. The nearest residences appear to be about 3,500 feet to the northwest, as measured in Google Maps.

History:

According to the Koegel Meats website, by the mid-1930s, the Koegel's founder, Mr. Albert Koegel, constructed a plant in Flint to make meat products. In 1972, his son had the current manufacturing plant along Bristol Road constructed.

During the 1980s through the 2006, AQD periodically conducted inspections of the current plant. However, AQD files containing inspection records were sent to the State of Michigan (SOM) Records Center for storage and were ultimately destroyed under the SOM records retention policies. The database used by AQD between 1991 and 2006 for inspection activity reports is no longer accessible to the AQD Lansing District office, following the introduction of a new database in late 2006 or early 2007. Thus, AQD did not have any current records of plant inspections, prior to today's inspection.

There are no records of any complaints being received by AQD since the 2006/2007 introduction of the current database, the Michigan Air Compliance and Enforcement System (MACES).

Safety apparel required:

A hair net is required (provided by plant personnel) to ensure the quality and cleanliness of food.

Odor evaluation:

I drove by the plant at 10:42 AM, on Bristol Road, to check for offsite odors. There was a brief distinct and definite scent that smelled like hot dogs being grilled, as I approached from the east. Weather conditions were partly sunny and humid, and 79 degrees F, with winds out of the southwest at 10 miles per hour. The hot dog smell was determined insufficient to constitute a violation of Rule 901(b), which prohibits air emissions which cause unreasonable interference with the comfortable enjoyment of life and property.

Arrival:

I arrived at 10:45 AM, next to the plant office. There were no odors by the office. Winds were 10 mph out of the southwest. I saw what appeared to be steam, rising above the office intermittently. Uncombined water vapor is not considered to be a regulated air contaminant.

Upon entering the office, I presented my identification/credentials, per AQD procedure. I explained the

reason for my visit, and soon met Mr. James Lay, Plant Manager. He remembered previous AQD staff conducting inspections here, and has spoken most recently with AQD's Nathan Hude (now assigned to the Waste Management & Radiological Protection Division of the DEQ). He accompanied me through the plant.

Inspection:

It is my understanding that their meats are pre-cooked onsite, and this is done with the use of steam from boilers, and with smoke houses. Mr. Lay explained that they use hardwood sawdust, and burn it to create smoke, in their 1,000 cubic feet per minute (cfm) smoke houses. He advised me that they have not purchased any new equipment for the past 20 years, since they had added an additional smoke house. He indicated that these were the same processes which AQD had last inspected (AQD's Robert Lamrouex was the inspector at that time, but has since moved out of Michigan).

We walked through the plant, which appeared clean and neat.

2 natural gas-fired boilers; Rule 282(2)(b)(i):

Both boilers are 10,463,000 Btu/hr, 250 hp Sellers boilers, and are fueled by sweet natural gas. Their rated heat input capacity is well below the maximum allowed by the Rule 282(b)(i) permit exemption. Mr. Lay explained they were natural gas single pass boilers. They make steam both for hot water, and for cooking, I was advised. They do not actually heat the building itself; rather, roof-mounted heaters are used to heat the building in cold weather, I was told. He indicated that steam from the exhaust stacks on their building may be mistaken for smoke in the cold months of the year. I acknowledged that I have frequently seen steam while driving by their facility, when ambient temperatures are cold.

Mr. Lay showed me the individual boilers. Boiler #1 was running, with 4,792 lbs/hr steam

I wrote down data from the boiler name plates, as follows:

Sellers #1; 10,463,000 Btu/hr

Invoice: 84-326-1; C-154-5729

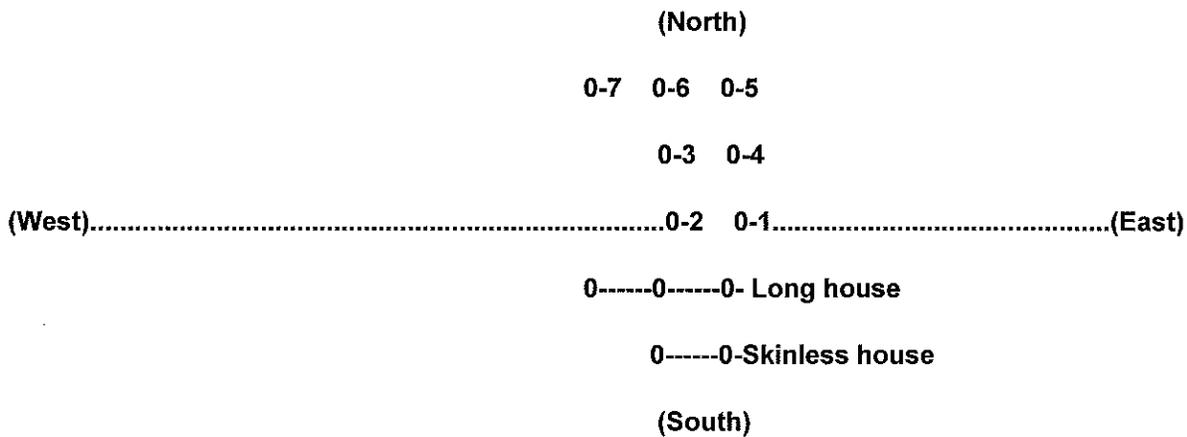
Sellers #2; 10,463,000 Btu/hr

Invoice: 84-326-2; C-154-5729

Smokehouses 1-7, Long house, and Skinless house; Rule 301:

I was given a look inside individual smoke houses which were operating, including the Long house, the Skinless house, and smoke houses Nos. 2 and 4. They were filled with meat products being cooked by steam and smoke. The smell of smoke from the burning of hardwood sawdust was distinct and definite, but I did not find it to be excessive. The smokehouses appeared to be clean and neat. Mr. Lay indicated that they try to run at 1,000 scfm for each smoke house, and have exhaust temperature be around 170 degrees F.

The layout of the stacks on the roof is shown below (not to scale), with zeroes representing individual stacks, and an accompanying number to identify the number assigned to each stack.



We climbed up a ladder, onto the roof. All of the smokehouse exhaust stacks were of the "no loss" design, having "rain sleeves" to keep out rain, while still allowing exhaust to be released unobstructed vertically upwards.

Visible emissions were intermittent from the exhaust stacks, as it was explained to me that they were batch processes, rather than continuous processes. The opacity ranged from 0-5% sometimes as high as 10%. It was clear, however, that visible emissions from any single exhaust stack would average out to be well below 20% opacity. Weather conditions were mostly cloudy and about 80 degrees F, with winds out of the southwest at 15-20 mph.

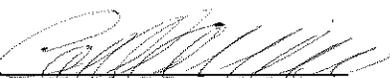
Instantaneous checks of opacity are noted below:

- Smokehouse stack #2: For a short time, opacity was 5%. At 11:25 AM, the opacity ceased.
- Smokehouse stack #5: This smoke house was not operating.
- Smokehouse stack #6: This smoke house was not operating.
- Smokehouse stack #7: This was running, at 0% opacity.
- Longhouse east stack: Intermittent opacity; 5-10% at 11:30 AM, and 5-10% at 11:35 AM.
- Skinless house east stack: Intermittent opacity; 5-10% at 11:34 AM.

Also up on the roof were two workplace vents with rain caps, for releasing excess heat from the work areas of the plant as needed, for employee comfort. Worker comfort ventilation is not regulated by AQD.

Conclusion:

The facility was clean and neat. No instances of noncompliance could be found. I left the plant at 11:54 AM.

NAME:  DATE: 11/8/2018 SUPERVISOR: 