

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

B497773630

FACILITY: Conagra Foods Packaged Foods LLC - Vlasic Pickles		SRN / ID: B4977
LOCATION: 415 S. Blacks Corners Rd., IMLAY CITY		DISTRICT: Lansing
CITY: IMLAY CITY		COUNTY: LAPEER
CONTACT: Raju Markose , Environmental Manager		ACTIVITY DATE: 07/22/2024
STAFF: Loren Hicks	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: Regular unscheduled facility inspection.		
RESOLVED COMPLAINTS:		

On July 22, 2024, EGLE-AQD represented by L. Hicks, G. Knauss, and R. Fuller conducted a scheduled inspection of Vlasic Foods, Inc., which was last inspected by the AQD in 2015, for the purposes of assessing permit compliance. Vlasics Foods, Inc. prepares and packages pickles for consumer and retail trade. The facility has three boilers, a total six production lines (each with ink and adhesive applications), and an emergency generator.

Grace, Rachel, and I arrived on site about 10 a.m. on Monday, July 22, 2024. As odor evals are historically part of inspections at the site, and since the weather permitted, we spent the first hour conducting an odor evaluation. We took two routes and multiple samples points since there were competing odors; around most of the immediate perimeter, there was indeed a distinct if intermittent odor of dill/vinegar/ pickles, but at no point would I have described it to be overwhelming or objectionable.

After conducting the odor eval, we checked in with security and asked to speak with Mr. Raju Markose. (Note to inspectors: you will be asked to remove all jewelry, including piercings.) Mr. Markose met us at the gate and then led us to a conference room where he introduced Mr. Chevrette (HVAC team leader), Mr. Wagner (Plant Manager), Mr. Langley (Facilities), and Mr. Brandt (Maintenance & Facilities Lead). We discussed the purpose of the visit, as well as what equipment was operating under which permits/exemptions, and what the requirements for each were. I had a few copies of the exemption handbook, so we went through the exemption requirements together. I told them what processes I would like to see, and then we went on to tour the facility (after donning PPE).

We looked at the South Boilers (400 & 600 hp) first. Both were running and using natural gas as fuel. I got pictures of both boiler plates. Then we went to look at the North Boiler. The North Boiler has a pre-heater on it. It was running, and it is using exclusively natural gas as fuel. I was told that it has been mechanically de-rated from 600 hp tp 400 hp for mechanical operational reasons, but that they did not wish to update their permit for the North boiler at this time.

Next, we went to go look at their packaging lines. Their ink and adhesive processes are apparently very different than what they were in 2015; however, after the walk-through, it seemed likely that they will be able to continue under the same exemptions. Their adhesive, ink, and hot melt applications all take place consecutively on the same line, and there are six identical lines. Almost all the equipment has been upgraded and improved since the AQD's last inspection. Many labels that were previously glued on have been replaced by printed stickers.

The general process is as follows: glue is applied to a label (rolled, swiped, or sprayed) and the label is pressed onto the sealed jar; the expiration date is spray-printed onto the jar; the jars are folded into a box which is sealed around them with hot melt (the exact number of jars may vary); the box is wrapped with plastic and heated to shrink it; a label is printed and applied to the box; and then the box is sent to stack in inventory.

The shrink wrap process is the only process that exhausts to atmosphere via a vent-hood; everything else exhausts into the plant environment. They have a small metal working shop with portable welders for permitted hot work. They have a parts washer that appeared to be in good order; however, I did leave them some signage. They do have an emergency backup generator. They informed me that it runs on natural gas, and not diesel as previously recorded. It's located in the lot across the street from the facility proper, so we went to see it last. It's worth noting that the generator was running while we were there. I believe they said that it was a test, but they did turn it off while we were there. I was told it runs for 10 mins per week for testing and is not independently monitored for gas usage.

On the way back to the conference room, I asked our guides to identify various stacks. I did see steam, but no other visible emissions. When we sat back down, I asked some follow up questions, as did Rachel & Grace, esp. regarding 'de-rating' the North boiler, available records, and the possibility of conducting a PTE. I told them I'd be in touch with a request for further records shortly and that concluded our visit.

I sent a records request to Mr. Markose on 07/24/24, and we corresponded back and forth thru 08/13/24. While I was reviewing records, I noticed that their adhesive usage exceeded the limit allowed by exemptions. I confirmed this with my supervisor on 08/27/24 and informed Mr. Markose on 08/28/24. The exceedances, if accurate, would require that a violation notice be issued.

Mr. Markose informed me that they had not been keeping monthly records of adhesive use, and that the records he had given me were estimates based on purchase orders. He said he'd speak with his production line manager to get a more accurate estimate based on actual adhesive amount used, and not amount purchased. He provided a second estimate of the amount of adhesive used on each line based on the percentage of total production per line. From that estimation I repeated my calculations of gallons (minus water) used per line, and found the amounts were still in excess of what is allowed under the exemption.

After some discussion of how best to account for their actual production usage, I found that the determination would rest on the water content of the adhesive. If the water content were more than 42% by weight, then Vlastic Foods, Inc would technically be under the exemption emission limit; however, if the water content were less than 42% by weight, then they would be over the exemption limit, meaning that they would not be operating within compliance. After discussion with my supervisor, I arranged a meeting with the company and permits section on Sept. 4th to further discuss the requirements of the exemption and to explore the possibility of obtaining a permit for one or more of the adhesive lines.

During the meeting on September 4, 2024, Vlastic staff explained that the product percentage per line was by carton, but that not all cartons are the same size (i.e. have the same

number of jars needing labels, etc.), so they're going to provide a third estimate, along with the water content from their adhesive to attempt once more to meet the exemption. We also provided them some information about permit applications during the meeting, and they seemed to favor the exemption, but were at least open to considering obtaining a permit in the future should the exemption prove untenable.

Henkel (the producer and distributor of the adhesive in question) confirmed that the water content of the adhesive ranges from 45-55 %, and Mr. Markose provided a third estimate of adhesive usage that accounts for amount of adhesive purchased, percentage of production run per line (including split lines), and product carton content (i.e. number of jars per carton being labelled). With those two key pieces of information, I repeated my calculations of gallons (minus water) used per line and found the total amounts to be under the upper limit listed in the exemption for the last six months (see image attached).

(gal)	jan	feb	mar	apr	may	jun	jul	aug	sep	oct	nov	dec	Total
line 1	2.33	70.51	36.70	94.56	111.74	101.96	95.39	-	-	-	-	-	513.18
line 2	-	94.07	40.92	95.73	88.41	104.81	94.11	-	-	-	-	-	518.05
line 3	49.43	145.52	48.23	50.75	122.34	135.30	152.16	-	-	-	-	-	703.74
line 4	8.15	79.69	23.93	34.19	37.20	44.25	44.98	-	-	-	-	-	272.39
line 7	-	-	-	12.17	120.09	106.58	106.43	-	-	-	-	-	345.26
line 9	-	-	-	12.17	120.09	106.58	106.43	-	-	-	-	-	345.26
total	59.91	389.80	149.78	299.57	599.85	599.49	599.49	-	-	-	-	-	2,697.89

Due to the complicated process of obtaining accurate estimates and records, I would still strongly recommend that a permit for adhesive use on these lines be obtained; Nicholas Carlson confirmed that Vlastic Foods, Inc. has been in touch to request follow-up information regarding the permit application process. That issue being addressed and resolved, I've included a table of the processes I observed during my inspection and their governing rules & regulations with some discussion below.

Emission unit	Permit to Install, or exemption rule	Installation date	Federal regulation	Operating status
North boiler; 600 hp	230-97	10/8/1997	40 CFR Part 60, Subpart Dc	Compliance
South boiler; 600 hp	282(b)(i)	4/1/1988	N/A	Compliance
South boiler; 400 hp	282(b)(i)	4/1/1989	N/A	Compliance
Metal working processes	285(l)(vi)(B)	Unknown	N/A	Compliance

6 ink coating processes	287(c)	1/1/1979	N/A	Compliance
6 adhesive coating processes	287(c)	1/1/1979	N/A	Compliance
6 Hot melt adhesive process	287(i)	1/1/1979	N/A	Compliance
320 hp diesel-fueled emergency generator, 2.1 mmBtu/hr	282(b)(i)	1996 or 1997	40 CFR Part 63, Subpart ZZZZ; potentially 40 CFR Part 60, Subpart IIII*	Unknown

The North Boiler is permitted under PTI 230-97, and appears to operated as permitted: less than 448,560 gallons of fuel per year is being used, and I reviewed records that showed the fuel is exclusively natural gas provided by Consumer's Energy (which adheres to the appropriate sulfur content levels). The South Boilers have both historically operated under the exemption 282(b)(i); the physicality of the boilers have not changed, they continue to provide indirect heating by burning natural gas at an input capacity of less than 50 MMBTUs per hour, and so continue to meet the exemption. The emergency generator was originally recorded as running on diesel, but it was demonstrated to me that this is not accurate; the emergency generator runs on natural gas and meets the same exemption requirements as do the South Boilers, so I have updated it's exemption to reflect that information. [Note: Their natural gas is metered; they do not have an onsite storage tank.] No visible emissions were observed from the stacks of any of the three boilers or the emergency generator. Hot Melt processes are exempt under R287(i) with no caveats. Records demonstrated that their ink coating process met the record-keeping, exhaust, and usage (<200 gallons per line per month) requirements to continue using the exemption R287(c), and after some back-and-forth (see discussion above), the same was found to be true for their adhesive coating processes.

Taken into consideration, it is my belief that Vlastic Foods, Inc. is operating in compliance with the rules and regulations enforceable by EGLE-AQD.

NAME Loren Hicks

DATE 09/18/24

SUPERVISOR RB