

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

N182472790

FACILITY: Delta Faucet Company; a Masco Company		SRN / ID: N1824
LOCATION: 693 SOUTH COURT STREET, LAPEER		DISTRICT: Lansing
CITY: LAPEER		COUNTY: LAPEER
CONTACT: Scott Allen , EHS Supervisor		ACTIVITY DATE: 06/25/2024
STAFF: Loren Hicks	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: Regular Unannounced Site Inspection		
RESOLVED COMPLAINTS:		

On June 25, 2024, EGLE-AQD represented by L. Hicks and D. Rauch, conducted an inspection of Delta Faucet (SRN N1824) for the purposes of assessing compliance with their exempt-status equipment and processes. We arrived at Delta Faucet about 9:15 a.m. It was raining hard and smelled rather pungent outside the facility (winds were out of the SW, see the attached odor evaluation). Scott Allen and Emmanuel Reed met us at the front office and ushered us to their conference room. (Don King does still work there as a product engineer, but we did not meet with him that day.) We explained that we were there to conduct an inspection and review compliance of their exempt-status equipment and processes. In previous reports, there were eight noted types of emission units, and I requested specifically to see the production lines that used adhesives and had been operating as exempt under Rule 287(2)(c). We donned Personal Protection Equipment (PPE), and headed out to the plant floor.

We began where plastic beads are dried and blended, then melted and extruded into sheets and cut; this process is operating as exempt under R286(2)(a). We next looked at their thermal and vacuum forming processes; these processes are operating as exempt under R286(2)(d). We then continued to look at their trimming, routing, grinding, and routing processes; some of these lines had particulate controls, and some did not; however, all did exhaust to the in-plant environment. There was a notable quantity of plastic filings and shavings on the plant floor that I was told was periodically swept up throughout the day and sent to be recycled. These trimming units are currently operating as exempt under Rule 285(I)(vi)(b). They are in the process of transitioning from manual trimming to automated trimming; the most recent installation of an automated trimming process was within the last year or so, with more anticipated in the near future.

We spent the most time looking at the spray on adhesive processes. Of their 9 thermal/vacuum forming process lines, 5 of them use spray-on processes to apply an adhesive to the product surface. Of those 5, 3 have the adhesive sprayed automatically, and 2 have the adhesive sprayed manually. These lines have, until recently, operated as exempt under Rule 287(c); however, during the inspection it was noted that this exemption has requirements which are not being met. These adhesive lines used small, amber colored “pillows” of a viscous liquid glue produced by Hot Melt Technologies, and the plant operators referred to these lines as hot melt lines; however, technically, these lines are a type of surface coating line, and not necessarily a hot melt process, as “hot melt” refers to a category of adhesives, and not a type of process. Whether or not these adhesive coating lines could be considered a hot melt process would depend on the adhesive’s VOC content as listed in the SDS. (I will address this further below.)

We then continued on to see the plastic recycling machines (with particulate cyclone controls); these processes operate as exempt under R285(l)(vi)(B).

Before concluding, we did visit their machine shop to look at their parts washer. The parts washer does not use mineral spirits or acidic cleaners; the solution is aqueous and so operates as exempt under R281(h). The cleaning liquid is changed by a contracted third party called "Crystal Clean". Additionally, I was informed that they have added a new packaging process wherein products are secured in their packaging using sealed air or foam on demand; two reagents react chemically inside a sealed plastic bag in the presence of air to slowly produce a gas that fills the bag to capacity; it is my belief that this process could operate under the exemption 286(2)(e).

Once we finished the tour, we reconvened in the conference room. We advised that they were likely not currently meeting the requirements to operate their adhesive coating lines under Rule 287(c) due to the lack of both dedicated ventilation controls and monthly usage rate records; it was briefly discussed whether they could continue operating under a different exemption (for example, Rule 287(i) or Rule 287(b)), but more information was required to make that determination, and I typically request additional information in a follow-up records request post inspection. In my records request, I asked for the SDSs for their adhesive, the cleaning solution in their parts cleaner, and for the sealed-air process. Additionally, I requested that they send me their usage rates for their adhesive so that I could determine whether their emissions are under the 200 gallon per month limits and to check their VOC emissions. After undergoing corporate review, Mr. Allen provided the requested SDSs and stated Delta Faucet's belief that their Lapeer facility could operate their adhesive coating lines as hot melt processes under the exemption 287(i) in the stead of 287(c); this would relieve them of the requirement to keep monthly records (which I was informed they do not do). In order to claim the 287(i) exemption, I explained it was necessary for them to demonstrate the low VOC content characteristic of hot melt adhesives, which they were able to do to my satisfaction in their SDS. Accordingly, I have reflected this change in my report.

After some consultation with my team, I found the facility to be meeting the technical requirements of their chosen exemptions; I would suggest a follow-up inspection be schedule in the near future to verify anticipated process updates.

NAME Loren Hicks

DATE 07/31/2024

SUPERVISOR RB