

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

N636465614

FACILITY: Pilkington North America, Inc.		SRN / ID: N6364
LOCATION: 2121 W CHICAGO RD, NILES		DISTRICT: Kalamazoo
CITY: NILES		COUNTY: BERRIEN
CONTACT: Peter Carpenter , Plant Manager		ACTIVITY DATE: 11/29/2022
STAFF: Matthew Deskins	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Unannounced Scheduled Inspection		
RESOLVED COMPLAINTS:		

On November 29, 2022 AQD staff (Matt Deskins) went to conduct an un-announced scheduled inspection of the Pilkington North America (N6364) facility located in Niles, Berrien County. The purpose of the inspection was to determine the facilities compliance with Permit No. 570-96A (Opt-Out) and any other state and/or federal air regulations that may be applicable. Staff departed for the facility at approximately 9:20 a.m.

Staff arrived at the facility at approximately 10:40 a.m. Staff went into the glass enclosed entrance area where there is a sign in sheet, company policies, and a phone along with a facility contact list. Staff tried several different numbers but no one answered. Staff then noticed an employee inside and knocked on the entrance door to get their attention. The employee opened the door and staff introduced them self and stated the purpose of the visit. Staff then gave her a business card and she told staff to wait and she would go get someone. A few minutes later, Pete Carpenter (Plant Manager) came out to greet staff and he was one of the people staff had met with during the previous inspection. Staff introduced them self again and stated the purpose of the visit. Pete mentioned that the person who was currently overseeing environmental matters, Ariann Lawhorn, was on vacation but he would get Stacey Baker (Occupational Nurse for EH&S) who could probably assist staff. Pete then departed and came back a few minutes later with Stacey. Staff introduced them self to Stacey and then Pete and her led staff to a conference room. Once in the conference room, staff gave Stacey their business card and then explained the inspection process. Pete then departed to take care of some business but said he would come in again later to see how things were going.

After Pete departed, Staff went over the various permit conditions with Stacey and mentioned that they would need to see records for the various VOC emission requirements as well as the various HAP requirements contained in Special Conditions #1 and #2 respectively. Stacey said that she would get them and left the conference room. A few minutes later she came back with some records for staff to review. Staff then asked about the records for formulation data, VOC content, HAP content, etc. as required by Special Condition #3 and if they still have it on computer spreadsheet which they did. Staff will list the permit requirements at the end of the inspection report along with their compliance status comments. While staff was looking over some of records, Pete came back in and check on things and staff took the time to ask Stacey and Pete some general questions again about facility operations. The following is a summary of staff's discussions with Pete and Stacey (and later Shawn (Materials Planner)), about facility operations followed later by the review of the recordkeeping requirements.

According to Pete, Pilkington North America is still owned by Nipon Sheet Glass (NSG) and they currently employ approximately 298 people at the Niles facility. Pete said that business has been good and that they are still operating three shifts per day, five days per week, with some Saturdays if demand requires it. He said that 1st shift still operates at 100% capacity from 8 a.m. to 4p.m., 2nd shift runs at about 70% capacity from 4 p.m. to 12 a.m., and 3rd shift typically runs at about 50% capacity from 12 a.m. to 8 a.m. He said that their business is still strictly automotive and involves automobile windows and sunroofs that they may add various components to (brackets, clips, etc.) for Tier 1 and Tier 2 suppliers. They still have a wide customer base and their products could be used on just about any vehicle by any automobile manufacturer. He said that their current customer base is Subaru, Mazda, Nissan, Honda, Toyota, GM, and Chrysler for Tier 1 products (windshields, side windows, and back windows) and Ford for Tier 2 products (mainly sunroofs).

Staff then asked about the current equipment that they have at the plant and if it has changed any since the last inspection. Pete said that they currently have the 15 injection molding presses now (previously had 14) and 1 light assembly cell where they previously had 3 that were installed under the AQD Rule 287(c) permit exemption. Pete said that 2 of the light assembly cells were relocated to one of their plants in Ohio and that the Niles facility is trying to get away from doing any assembly and want to strictly do encapsulation. All the injection mold machines are permit exempt under Rule 286(2)(b). Pete said that the remaining light assembly cell still is equipped with 3 robots. Pete also confirmed, as he did during the previous inspection report, that they don't do any spraying of any materials/coatings and that those processes had ended when they got rid of the slipcoat cells years ago.

Staff then asked about the current operations at the facility and if any of the processes had changed from previously. Pete said that they haven't and the basic process for each injection press and/or cell at the facility is as follows, although there could be an additional step or two depending on the customer specifications:

Pilkington receives pre-cut window glass into their warehouse area that has already been painted around the edges as well as having other things such as the defrost lines installed, but that depends on the vehicle and manufacturer. They then have to apply a two-part primer through the use of what looks like a shoe polish applicator to areas where they will eventually have PVC injected onto it. The primer application can be done either manually or robotically although Pete said that most is applied robotically now. Staff then asked about the primer and if it still requires constant agitation after the two primer components are mixed. Pete said that they still have a storekeeper that does all the primer mixing for each assembly press and/or cell. Pete said that they also track all usage and we can check with them out on the plant tour.

Note about the primer question from above: When we were out on the plant tour, we had stopped in the room where all the mixing of the primers is done. While there Shawn showed staff how employees check out primers using the computer and where they print off a label that attaches to each container with its expiration time on it. Each of the primers does have a very short shelf life so they do have to keep it agitated somewhat after mixing. Staff had asked Pete earlier if the maximum primer usage for each press/cell was still about 2 quarts per 8-hour work shift as it had been previously. Both Pete and then later Shawn confirmed that it was about 2 to 3 quarts per shift.

After the employee checks out a primer and it is applied to the edge of the glass, it might then go through an infrared heater to pre-heat it for set-up if required. The glass then goes to an automated aligner that puts the glass in the exact position that is needed. It then goes through another infrared heater to re-heat the primer and glass. It then goes to encapsulation where the PVC is injected and molded around the edges of the glass. The glass then gets any excess PVC trimmed off manually where it's not wanted. They then clean the glass and apply another primer if the customer requires it. It then goes to a curing station where they may add clips or any other accessories if required. Accessories may also be added during the encapsulation process depending on the part specification. They then will package it for shipping.

After getting the overview of operations, staff then proceeded with Stacey and Shawn out into the production area. Pete had to depart again and staff thanked him for this time. During the tour staff noted that they appeared to still have the 5 heaters in the building that they had previously. They are all fired on natural gas and were each rated at 4.6 million btu/hr. These are exempt under AQD Rule 282(b). All the machining equipment observed in the maintenance area vents inside and is therefore exempt under AQD Rule 285(l)(vi). Staff observed operations at various cells during the tour along with the remaining light assembly area. Each cell has a specific vehicle window and/or process that it is being used for. Staff did not observe any parts cleaners or anything similar during the walk through. After the walk through, Shawn had to get going so staff thanked him for his time before he departed. Staff then proceeded with Stacey back to the conference room. Once back at the conference room, Staff mentioned that everything looked good and if they had any further questions they would follow up with her. Staff also mentioned that she may want to look into reviewing their Potential to Emit (PTE). Staff said that with a lot of the previously permitted equipment removed, they may be able to show that they are a true minor source of air emissions. Staff then explained what the differences would be for true minor source compared to their current Opt-Out Status. She said that she would bring it up to her superiors. Staff then thanked her for her time and departed the facility at approximately 12:30 p.m.

The following are the Special Conditions of the Opt-Out permit and staff's comments regarding them.

The permit for the facility lists seven emission units and they are as follows: EUCCELLCOAT, EUPRESSES, EUSLIPCOAT1, EUSLIPCOAT2, EUSLIPCOAT3, EUSPRAYCOAT, AND EUMIXINGSTATION. As was mentioned in previous inspection report write-ups, the only remaining processes located at the facility would fall under EUPRESSES and EUMIXINGSTATION. The facility dismantled and got rid of the cellcoat, slipcoat, and spraycoat operations years ago. Also as mentioned earlier, the facility only has one assembly cell now installed under the AQD Rule 287(c) permit exemption. Compliance with the exemption will be mentioned after the discussion of the permit special conditions. The following lists the Special Conditions (SC) of their permit and what staff noted.

SC #1: The facility is maintaining records that indicated that the VOC emission rates do not exceed 180 pounds per day nor 33 tons per year based on a 12-month rolling time period. Staff reviewed records for the 12-month rolling time period ending October 2022 and the highest daily VOC emissions were in January 2022 at 76 pounds and the highest yearly VOCs at 7.56 tons in September 2022.

SC #2: The facility is maintaining records that indicate total HAP emissions do not exceed the 22.5 ton permit limit based on a 12-month rolling time period. 12-month rolling records reviewed by staff ending October 2022 indicate the highest HAP emissions for the time period were 3.69 tons in September 2022. The facility is also maintaining monthly emission records for individual HAPs and totals based on a 12-month rolling time period. Records reviewed for the previously mentioned 12-month rolling time period for individual HAP indicated Toluene is typically the HAP with the highest 12-month rolling amount at 3.32 tons.

SC #3: The facility is keeping records of the following as required and all the information is maintained on a computer spreadsheet: 1) product manufacturer formulations 2) days of operation each month 3) The identification of the product used, it's VOC content, the monthly total amount used, and the mixing ratio, if any, of any solvent, reducer, or thinner used 4) the HAPs in any products and the % content 5) the monthly VOC emissions in pounds per day 6) the monthly VOC, individual HAP, and total HAP emissions in tons per month 7) the 12-month rolling emission totals for VOCs, individual HAPs, and total HAPs.

SC #4: The facility is calculating VOC emissions in an acceptable manner.

SC #5: The facility no longer does any spray coating but it does have approval to use manufacturer's formulation data to determine VOC content of coatings used.

SC #6: Not-Applicable. The slipcoat operations have been removed. This condition required that they couldn't be operated unless exhaust filters were in place and operating properly.

SC #7: Not Applicable. The facility no longer has High Volume Low Pressure (HVLP) guns as applicators because the slipcoat and spray coating operations have been removed.

SC #8: The facility exhausts discharge gases through appropriate stacks in EUPRESSES. The exhaust stacks have been removed for the slipcoat operations.

SC #9: The facility stores all waste in sealed 55-gallon containers D&B Environmental hauls it away every quarter. They are still classified as a small quantity hazardous waste generator.

SC #10: The facility appears to be calculating HAPs emissions in an acceptable manner.

SC #11: The facility is using manufacturer's formulation data to determine the HAP content of the products they use which is allowed.

Inspection Summary: Overall the facility appears to be in COMPLIANCE with its recordkeeping requirements contained in Permit No. 570-96A. The remaining one light assembly cell installed under the AQD Rule 287(c) permit exemption appears to be meeting the exemption requirement with coating usage well under 200 gallons per month.

NAME Matt Dahl

DATE 12-1-22

SUPERVISOR RIL 12/1/22