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

P072143441

FACILITY: Poltrona Frau Group		**SRN / ID:** P0721
LOCATION: 2655 Product Drive, ROCHESTER HLS		**DISTRICT:** Southeast Michigan
CITY: ROCHESTER HLS		**COUNTY:** OAKLAND
CONTACT: Kevin Chambers , Maintenance Manager/Environmental Technician		**ACTIVITY DATE:** 02/02/2018
STAFF: Adam Bognar	**COMPLIANCE STATUS:** Compliance	**SOURCE CLASS:** MINOR
SUBJECT: Scheduled Inspection		
RESOLVED COMPLAINTS:		

On February 2nd, 2018, Michigan Department of Environmental Quality-Air Quality Division (MDEQ-AQD) Staff, I, Adam Bognar, Lauren Magirl, and AQD intern Zarnab Rehman conducted an unannounced targeted inspection of Poltrona Frau Group located at 2655 Product Drive, Rochester Hills, MI, 48309. 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); and Michigan Department of Environmental Quality-Air Quality Division (MDEQ-AQD) Administrative Rules.

A LOV was issued on July 13, 2016 for the installation and operation of adhesive booths without a permit to install. A follow up inspection on 10/18/2016 by Tyler Salamasick showed that the violations had been resolved. The facility installed improved adhesive booth filters and began keeping records indicating that adhesive usage is below 200 gallons per month. Poltrona Frau Group now operates its adhesive spray booths without a permit to install pursuant to Rule 287 (2)(c).

We arrived at Poltrona Frau Group's facility at around 1:30 pm. We met with Mr. Kevin Chambers, Maintenance Manager/Environmental Technician. We identified ourselves, provided credentials, and stated the purpose of the inspection. Mr. Chambers explained the processes at the facility and gave us a tour of the building.

Poltrona Frau Group operates during one shift from 8 am to 5 pm with fifty employees. They specialize in applying leather upholstery to automotive dashboards, steering wheels, and other interior parts for major automakers. No automotive seats are currently processed. Cow-hides are received in a semi-processed form. The hides are cut to size, roughed/cleaned, and adhered to parts. Cutting and roughing operations are ventilated to the general in-plant environment. The cutting and roughing operations appear to be exempt from Rule 201 requirements pursuant to Rule 285 (2)(l)(vi)(B).

The facility operates two hand-spray adhesive booths, one robotic adhesive spray booth, and an acetone cleaning station. None of the booths were in operation during the inspection.

Mr. Chambers first showed us the two hand-spray booths, booths 1 &2. Automotive parts are placed into these booths on a stand and hand-sprayed with adhesive. Adhesive spray is directed toward a fabric filter positioned behind the part. A blower pulls air through the filters so that overspray is captured by the filter. They recently upgraded their filtration system to include both a fabric sheet (VLEX Paint Blue Roll) and fabric pocket filters (Dust Lock Cube). Overspray is first pulled through the sheet and then through the pocket filters. The filters were in place and in good shape at the time of the inspection. Mr. Chambers informed me that the filters were just changed earlier in the day. The fabric sheets are changed every two weeks, whereas the pocket filters are changed quarterly.

Adhesive usage records for booths 1&2 are kept next to the spray booths. Records for the most recent two-year period were made available. The records were up to date at the time of the inspection. I randomly inspected the record sheets and collected records for December 2017 and January 2018 (Attachment 1). They generally mix batches of adhesive for these booths several times per day. The adhesive mix includes 942 grams of the adhesive, *Idrotex 200,* and 56 grams of the adhesive activator, *Attivatore DN*. Usage records show the total *Idrotex 200* used in January 2018 was 129,000 grams, and the total Attivatore DN used was 7074 grams. The attached EPA method 24 analysis shows the density

of Idrotex 200 to be 8.91 lb/gallon (Attachment 3). The SDS for *Attivatore DN* (on file from previous inspection) lists the density as 1.150 kg/L. Using these numbers, the total usage for January 2018 is approximately 38 gallons. December 2017 usage was approximately 25 gallons. The adhesive is water based with a VOC concentration of 0.07 lb/gallon (Attachment 3). These booths appear to be exempt from Rule 201 requirements pursuant to Rule 287 (2)(c).

Located next to booths 1&2 is an acetone cleaning station. Certain leather cuts need to be cleaned with acetone after roughing before they are adhered to the part. The acetone is applied with a paint brush. It is purchased in five-gallon containers which are stored in a flame cabinet. Acetone from these five-gallon containers is transferred into a smaller container to be used in the cleaning station. At the end of the day, any leftover acetone in the smaller container is dumped into a 55-gallon drum and taken by Safety-Kleen. Usage appears to be less than 1000 pounds per month.

Acetone Density = 6.60 pounds/gallon
Rule 290 Limit = 1000 pounds in a month
(6.60 pounds/gallon)(5 gallon pail) = 33 pounds of acetone per 5 gallon pail*
(1000 pounds)/(33 lbs of acetone per pail)

=> 30.3 pails per month before 1000-pound emission limit is exceeded.

In other words, to exceed 1000 pounds per month of acetone emissions, they would need to use approximately one full five gallon pail of acetone every day of the month. Only fractions of the pail are used daily. Based on this usage evaluation the acetone cleaning station appears to be exempt from rule 201 requirements pursuant to Rule 290.

Next, we inspected the robotic spray booth, booth 3. The majority of adhesive spraying is done in this booth. The process is identical to the hand-spray booths except a robot performs the adhesive spraying. Overspray is pulled through a fabric filter sheet and fabric pocket filters. The fabric filter sheet was visibly dirty in this booth; however, the pocket filter was relatively clean. I inspected the area behind both filters and did not observe any evidence that adhesive is getting through the filtration system. The new filtration system appears to be working well. Filters are changed at least once per week in this booth.

Adhesive usage is higher in booth 3 than in booths 1&2. Usage records are kept next to the booth. Records for the most recent two-year period was made available to me. I randomly inspected records from January 2017 to January 2018. Adhesive usage records appear to be kept satisfactorily at this facility. Adhesive batches of varying size are mixed several times daily. The same adhesive/activator mixture is used as in booths 1&2. Usage records for booth 3 (Attachment 2) show that January usage was approximately 65.5 Gallons, including water. Booth 3 appears to be exempt from Rule 201 requirements pursuant to Rule 287 (2)(c).

Mr. Chambers showed us the rooftop rain caps. In 2016, there was a concern forwarded to AQD from the MDEQ Industrial Storm Water Program that some of Poltrona Frau Group's adhesive product may be entering storm drains. A follow up inspection by AQD staff Tyler Salamasick and Kerry Kelly on 7/13/2016 confirmed that a fluffy white substance was building up on the inside of the rooftop rain cap, also some of the white substance was flaking off and had fallen on nearby vehicles.

During our rooftop inspection we did not observe any fallout or buildup of material under the rain caps for any of the three booths. It appears that the new filtration system has addressed this issue.

Compliance Determination

Our observations made during our inspection and record review indicate that Poltrona Frau Group is operating 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); and Michigan Department of Environmental Quality-Air Quality Division (MDEQ-AQD) Administrative Rules.

NAME Adam Boagni DATE 2/28/2018 SUPERVISOR SK