

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

N799964060

| | | |
|---|--|----------------------------------|
| FACILITY: SHELBY CABINETS | | SRN / ID: N7999 |
| LOCATION: 4651 25 MILE RD, SHELBY TWP | | DISTRICT: Warren |
| CITY: SHELBY TWP | | COUNTY: MACOMB |
| CONTACT: Ann Orzel , | | ACTIVITY DATE: 07/15/2022 |
| STAFF: Noshin Khan | COMPLIANCE STATUS: Non Compliance | SOURCE CLASS: SM OPT OUT |
| SUBJECT: scheduled, announced inspection | | |
| RESOLVED COMPLAINTS: | | |

On Friday, July 15, 2022, I (Noshin Khan, EGLE-Air Quality Division) performed a scheduled, announced inspection of Shelby Cabinets, located at 4651 25 Mile Road in Shelby Township, Michigan. The facility manufactures wood cabinets. Adam Bognar, EGLE-AQD, accompanied me for the inspection. 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), the administrative rules, and the conditions of Permit to Install (PTI) No. 115-08. Ann Orzel, Secretary, met us in the parking lot of the facility.

Ann led us to the office where Nikki DeClercq, Design Consultant and newly in charge of recordkeeping, showed us the facility's updated excel sheet containing material usage and emissions records. The sheet was put together with the help of Jenifer Dixon (Air Quality Liaison, EGLE-Environmental Support Division) after the facility received a violation notice for inadequate recordkeeping in 2021. Nikki emailed me the excel sheet on July 20, 2022. It contains monthly and 12-month rolling emissions for VOCs and individual and aggregate HAPs. The spreadsheet is updated at the end of each month. Spray booth solvent usage is recorded each day in a separate folder and included in the monthly update. After briefly viewing the spreadsheet in the office, we began the facility walkthrough. The records provided show compliance with recordkeeping requirements EU-WOODCOAT Special Condition (S.C.) 1.11 and FGFACILITY S.C. 2.4.

First, Ann walked us to Building 2, where woodcutting processes including sawing, milling, and sanding are performed and the facility's spray booth is located. The wood cutting and finishing processes involve emissions to the general in-plant environment and are exempt from permit to install requirements per Michigan Air Pollution Control Rule R 285(I)(vi)(B). Sam Dimaggio, Spray Booth Foreman, showed us the spray booth, consisting of two separate rooms. The first room is mainly for priming and sealing, while the second is mainly for drying and finishing. Adam and I observed paper mesh filters in place in both rooms. A notable number of filters had gaps, especially in the second room. I asked how often the filters are cleaned and replaced and Sam said they are cleaned one to two times a week and replaced as needed when the filter appears to fray, about once every few months. He also said that extra filters are kept on site. Adam gave a verbal warning that the filters should not have the observed number of gaps and may require replacement more often. He also noted the possibility that the cleaning method was morphing the filters and that purchasing better filters may prevent the issue.

Sam then showed us the paint storage room, where I observed a strong solvent odor. Adam and I noticed multiple open containers of solvents, which Sam told us included solvents used in jobs from the day before as well as jobs from that day. Adam gave a verbal warning that the containers should be closed if not in use for jobs being done on the same day. Waste solvents are stored in 55

gallon containers and collected by U.S. Industrial Technologies, Inc. for transport to Tradebe Treatment & Recycling, LLC, in compliance with EU-WOODCOAT S.C. 1.3.

Next, Sam walked us to the side of Building 2, where we observed the cyclone and baghouse system which control emissions from Building 2. Saw dust from the cyclone is collected in a container on the side of the building which is cleaned out once a month. Adam and I observed no dust on the ground in this area. The baghouse filters were changed about 6 months prior to the day of our inspection. Clean air is cycled back into the building. The stack exhaust is cleaned out annually. The particulate control equipment processes are exempt from permit to install requirements per R 285 (l)(vi)(C).

Sam then led us back to Building 1, where Ann showed us the finishing and assembly area. Adam noticed a small tank of hot glue, which is used in the assembly process. Use of this adhesive is not currently included in the facility's permit and may constitute a Rule 201 violation. The facility says that less than 2 gallons of adhesive are used per day, which would make its use exempt under R 287 (2)(a); however, the facility was unable to provide records to support this. Nikki provided an EDS for the adhesive which indicates that no reportable quantities of hazardous materials are present.

We then walked back to Building 2, where Sam showed us spray guns used for coating application. The guns have a regulator to show pressure, indicating compliance with EU-WOODCOAT S.C. 1.7.

We were joined by Tom Urbin, facility co-owner, as we walked back to the office for a brief post-inspection meeting. Adam and I made Tom aware of the issues with the gaps in the spraybooth filters and the open containers in the paint storage room. On August 26, 2022, Nikki emailed me pictures of the spraybooth filters and paint storage room which showed that a number of filters had been replaced and that lids were placed on solvent containers, so it appears the facility has made necessary changes in response to these warnings and is in compliance with EU-WOODCOAT S.C. 1.5 and 1.6.

Per PTI 115-08, EU-WOODCOAT S.C. 1.1, the facility has an emission limit of 30.0 tpy for VOCs and acetone as a 12-month rolling value. According to the facility's records, the highest 12-month rolling value for VOCs and acetone emissions from January 2020 to June 2022 was 12.70 tpy in May 2021, which less than the limit of 30.0 tons.

Per FGFACILITY S.C. 2.1a and 2.1b, facility's individual HAP emission limit is less than 9.0 tpy as a 12-month rolling value, and aggregate HAPs limit is less than 22.5 tpy as a 12-month rolling value. According to the facility's records, the highest aggregate HAPs 12-month rolling emissions value from January 2020 to June 2022 was 2.48 tpy in May 2021, which is less than the permitted limit. The facility appears to be in compliance with this condition.

Per EU-WOODCOAT S.C. 1.2, the facility has a material limit of 6.10 lb VOCs/gallon (less exempt solvents) for coatings. Based on the facility records, there were two coatings listed that seem to exceed this value:

- WS2VB6 (WOODSONG II Amazing Stain Base) – 7.07 lb VOC/gallon less exempt solvents
- WS2B20 (WOODSONG II Hi-Solids Stain Base) – 6.98 lb VOC/gallon less exempt solvents

WS2B20 was replaced in 2020 and not used since, according to the facility records. I asked Nikki for the SDS/EDS for this coating, and the EDS indicates a VOC content of 5.56 lb VOC/gallon less

exempt solvents, which falls under the permitted limit. I asked Nikki to correct this value in the provided emissions records.

The EDS for coating WS2VB6 (WOODSONG II Amazing Stain Base) indicates a VOC content of 7.07 lb/gallon less exempt solvents, which is consistent with the facility records. I asked the facility for more information on how this coating is applied, and according to Sam, the coating is applied in a mix of up to 50% lacquer thinner, C18936. I asked Nikki for the EDS for C18936 and the provided document indicates that the VOC content less exempt solids is 6.73 lb/gallon, which is also above the permitted limit. Application of WS2VB6 and C18936 in a 50/50 ratio results in a VOC content of 6.90 lb/gallon less exempt solvents. Application of WS2VB6 on its own or in a 50/50 combination with C18936 yields a material with a VOC content above 6.10 lb/gallon less exempt solvents. This is a violation of EU-WOODCOAT S.C. 1.2.

Nikki provided me with all EDS's for coatings used by the facility, as well as the approximate ratio of thinner each is combined with before the coating is applied. The EDS's indicate that WS2VB6 is the only coating that exceeds a VOC content of 6.10 lb/gallon less exempt solvents. I performed calculations using the coating/thinner ratios provided, and the combination of WS2VB6 and C18936 appears to be the only one that exceeds the facility's permitted material limit.

The facility appears to be in violation of EU-WOODCOAT S.C. 1.2 because of the use of coating WS2VB6, which, as applied, exceeds the permitted limit of 6.10 lb VOC/gallon less exempt solvents. The facility may also be in violation of Rule 201 for use of adhesive without a permit. Consequently, I am issuing a violation notice.

NAME Nashin Khan

DATE 09/30/2022

SUPERVISOR K Kelly