

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

N749966188

FACILITY: MOD INTERIORS, INCORPORATED		SRN / ID: N7499
LOCATION: 9301 MARINE CITY HWY, IRA TWP		DISTRICT: Warren
CITY: IRA TWP		COUNTY: SAINT CLAIR
CONTACT: Donald Megie , President		ACTIVITY DATE: 11/09/2022
STAFF: Noshin Khan	COMPLIANCE STATUS: Non Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: scheduled, announced inspection		
RESOLVED COMPLAINTS:		

On Wednesday, November 9, 2022, I (Noshin Khan, EGLE-Air Quality Division) performed a scheduled, announced inspection of Mod Interiors, Incorporated, located at 9301 Marine City Highway, Ira Township, Michigan. 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. 80-15. Upon arrival, I met with Donald Megie, President, Jessica Smeader, Accounting, and Brian Manasterski, in charge of product finishing.

Before walking through the facility, I discussed the facility's operations with Donald and Brian. According to Donald, the facility does architectural millwork and produces a variety of interior furniture and fixtures. Donald said that Mod Interiors has 37 employees, and the facility's current operating hours are 6AM-4:30PM, Monday through Friday.

Donald informed me that the facility has been working with Alliance Consultants in response to a violation received for not submitting a MAERS emissions report in 2021. Brian explained that he maintains usage records at the facility that are periodically sent to Alliance so that they can prepare the MAERS emissions report.

We then began the facility walkthrough, first going to the area of the production floor where the spray booths are located. Donald noted that a curtain previously blocked the spray booth area off from the woodworking area, and about 3 years ago a wall was constructed. Donald walked me through an enclosed spray booth (EU-BOOTH1 in the facility's permit). I observed fabric filters in place that appeared to be in good operating condition. Donald said that these filters are replaced about once a month or as needed.

Next to the enclosed spray booth is an open spray booth (EU-BOOTH2 in the facility's permit). I observed fabric filters in place that appeared to be in good operating condition. Donald said that these filters are also replaced about once a month or as needed, and that fabric filters are disposed of in dumpsters. I observed 55 gallon drums here that are used to store waste. Donald said that the containers are taken by Clean Earth for disposal. HVLP applicators are utilized in both booths. I observed that coating containers stored in this area were kept with their lids closed.

Next we entered the woodshop area. A topcoat spray machine (EU-BOOTH3 in the facility's permit) is located here. This booth was not in operation during the inspection and staff noted that it is hardly used. Donald showed me various equipment used for woodworking, including an edge bander, a wide belt sander, panel saws, a shaper, and a radial arm saw. He pointed out four bag filters part of an internally-exhausting system used to control particulates from these processes.

Donald said the bags are replaced as needed and the drums collecting particulates are emptied weekly. One of the bag filter systems is dedicated to a CNC. The woodworking processes are exempt from permit requirements per Michigan Air Pollution Control Rule 285(2)(l)(vi).

Donald showed me an area where PVC glue is rolled onto veneers for application on wood parts, which are put into a hot press. This process is associated with EU-PVCGLUE in permit 80-15.

At the end of the walkthrough I asked if there are any parts washers in the facility. Brian and Donald said there was one and walked me to it. The washer has a lid that was closed as it wasn't in use during the inspection. The washer's vapor-air interface is less than 10 square feet and exempt from permit requirements per Rule 281(2)(h). I noticed that the washer didn't have instructions posted on it and reminded Brian and Donald of the requirement per Rule 611(3). They said they were aware of the requirement and previously had instructions posted, but the paper may have been removed after wear and tear. I provided them a copy of the AQD parts washer instructions which they said they would laminate and post. According to Donald, the facility does not have any emergency generators.

Based on observations during the inspection, the facility appears to be in compliance with the following permit conditions:

FGWOOD

Special Condition (S.C.) III.1: I observed waste materials stored in closed, 55 gallon containers that are collected by a disposal company (Clean Earth).

S.C. III.2: Staff noted that spent filters are disposed of in dumpsters. This appears to meet requirements for minimizing the introduction of air contaminants to the outer air during filter disposal.

S.C. III.3: I observed coating and solvent materials stored in closed containers, in a manner minimizing fugitive emissions of VOCs and HAPs.

S.C. IV.1: I observed filters in place in the spray booths that were in good condition and appear to be maintained properly.

S.C. IV.2: I observed HVLP applicators and pressure test caps in the spray booths.

After the inspection, the facility sent me their recordkeeping spreadsheet and SDS's for the coatings they use. In the spreadsheet, they track daily use of acetone and coatings, and calculate the associated daily emissions of VOCs, acetone, light hydrotreated distillate, and HAPs. These emissions calculations are used to determine compliance with emissions limits listed in the following conditions in permit 80-15:

FGWOOD

S.C. I.1: VOC and acetone combined limit of 9.5 tons per year (tpy), based on a 12-month rolling time period as determined at the end of each calendar month

S.C. I.2: VOC and acetone combined limit of 2,000 lb/month

S.C. I.3: Light hydrotreated distillate (CAS No. 68410-97-9) limit of 31.2 lb/day

FGFACILITY

S.C. I.1: Individual HAP limit of less than 9.0 tpy based on a 12-month rolling time period as determined at the end of each calendar month

S.C. I.2: Aggregate HAPs limit of less than 22.5 tpy based on a 12-month rolling time period as determined at the end of each calendar month

S.C. I.3: Light hydrotreated distillate limit of 1,908.7 lb/year based on a 12-month rolling time period as determined at the end of each month

I noticed that the sheet did not contain monthly and 12-month rolling emission calculations as required by the following conditions in permit 80-15:

FGWOOD Special Condition (S.C.) VI.3.c:

VOC and acetone mass emission calculations determining the monthly emission rate in pounds and tons per calendar month.

FGWOOD S.C. VI.3.d:

VOC and acetone mass emission calculations determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.

FGFACILITY VI.3.d:

Individual and aggregate HAP emission calculations determining the monthly emission rate of each in tons per calendar month.

FGFACILITY VI.3.e:

Individual and aggregate HAP emission calculations determining the cumulative emission rate of each during the first 12-months and the annual emission rate of each thereafter, in tons per 12-month rolling time period as determined at the end of each calendar month.

FGFACILITY VI.4.d:

Light hydrotreated distillate (CAS No. 68410-97-9) emission calculations determining the monthly emission rate in pounds per calendar month.

FGFACILITY VI.4.e:

Light hydrotreated distillate (CAS No. 68410-97-9) emission calculations determining the annual emission rate in pounds per 12-month rolling time period as determined at the end of each calendar month.

While comparing the coating SDS's provided to me with the emissions calculations, I found that the composition of the coatings in the SDS's did not match calculations in the spreadsheet for what was emitted. None of the coating SDS's listed light hydrotreated distillate as a component, but the spreadsheet indicated emissions of this compound. Several HAPs listed in the coating SDS's were not included in emission calculations.

I prepared an additional page in the spreadsheet that takes daily usage data and calculates monthly and 12-month rolling emissions for VOCs and acetone, light hydrotreated distillate, and individual and aggregate HAPs. On January 18, 2023, I met with Brian, Jessica, and Brittany Kutz of Alliance Consultants via Microsoft Teams to walk them through the monthly and 12-month rolling calculations and to ask about the inconsistencies between the SDS's and the emission calculations. I asked if calculations had been updated when coatings were switched out, and Mod Interiors staff said they hadn't made any changes to calculations in the sheet when coatings were changed. We discussed that the spreadsheet would be corrected by Alliance Consultants to correct emission calculations for each coating and add individual HAP calculations, as needed.

Based on our discussion, the facility is not maintaining chemical composition records required by the following permit conditions:

FGWOOD S.C. VI.3.b:

VOC and acetone content, in pounds per gallon, of each topcoat, adhesive coating, PVC glue, and clean-up solvents as applied.

FGWOOD S.C. VI.4.c:

Light hydrotreated distillate (CAS No. 68410-97-9) content, in pounds per gallon or pound per pound, of each material as applied.

FGFACILITY S.C. VI.3.c:

HAP content, in pounds per gallon or pounds per pound, of each HAP containing material used.

FGFACILITY S.C. VI.4.c.:

Light hydrotreated distillate (CAS No. 68410-97-9) content, in pounds per gallon or pound per pound, of each material as applied.

Because of the inconsistencies in the emissions calculations, I was unable to verify compliance with emissions limits listed in FGWOOD S.C. I and FGFACILITY S.C. I.

Mod Interiors, Incorporated is currently in violation of permit conditions FGWOOD S.C. VI.3.b-d, VI.4.c; and FGFACILITY S.C. VI.3.c-e, VI.4.c-e. in PTI 80-15. The facility's records do not include monthly and 12-month rolling emission calculations for VOCs, acetone, light hydrotreated distillate, and individual and aggregate HAPs. The VOC, acetone, light hydrotreated distillate, and HAP content of coatings has not been maintained in the facility's emissions calculations, making these calculations inaccurate. The facility will be receiving a violation notice for these recordkeeping issues.

NAME Nashir Khan

DATE 1/31/23

SUPERVISOR K. Kelly