

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

N175767560

<b>FACILITY:</b> MillerKnoll	<b>SRN / ID:</b> N1757
<b>LOCATION:</b> 2800 Estes St, NORTON SHORES	<b>DISTRICT:</b> Grand Rapids
<b>CITY:</b> NORTON SHORES	<b>COUNTY:</b> MUSKEGON
<b>CONTACT:</b> Evie Uithoven , EHS Specialist	<b>ACTIVITY DATE:</b> 05/04/2023
<b>STAFF:</b> Scott Evans	<b>COMPLIANCE STATUS:</b> Compliance
<b>SUBJECT:</b> On site inspection to assess compliance with air quality rules and regulations.	
<b>RESOLVED COMPLAINTS:</b>	

### Introduction

On May 4, 2023 State of Michigan Department of Environment, Great Lakes, and Energy Air Quality Division staff member Scott Evans (SE) conducted an on-site inspection of the Knoll, Inc. facility located at 2800 Estes St. in Norton Shores, Michigan, to assess compliance with air quality rules and regulations. This facility is a manufacturer of metal furniture. Many of the processes involved are air permitting exempt assembly operations, however the facility does operate a burn-off oven to clean equipment racks used in coating operations, which is permitted through Permit to Install (PTI) No. 215-16.

On the day of the inspection, SE conducted an inspection of the facility perimeter. During this inspection there were no observed odors or visible emissions. After this perimeter inspection the facility was entered and SE was greeted by Kurt Kalis and Evie Uithoven. The purpose of the visit was discussed and an inspection of the facility was conducted.

### PTI No. 215-16

This permit has special conditions for one flexible group (FG): FGRBO. This flexible group includes four a 0.75mmBtu natural gas burn-off ovens labeled EURBO1 – 4.

This FG has an emission limit of no visible emissions from any burnoff oven. During the inspection there were no visible emissions. It was discussed that there have been no incidents of visible emissions from any emission unit since the last inspection that was conducted in 2018.

There are two material limits for this FG. The facility may only operate the ovens using natural gas fuel and only powder coat racks may be processed in the ovens. Discussion with facility staff as well as observations of the operation of the units confirmed that both of these requirements are being met.

The facility is not allowed to use ovens for thermal destruction of rubber, plastics, uncured paints, or other materials containing non-chlorine halogens in the oven, nor are they allowed to process transformer cores. Discussion with the facility verified that procedures do not include processing any of these items or materials within the ovens. During the inspection only powder coat conveyor racks were observed being entered into the burn off ovens.

The facility may not operate the ovens unless a secondary afterburner that maintains a temperature of at least 1400°F, an automatic temperature control system, and an interlock system to shut down the primary chamber if the secondary chamber is not operating are all installed. Inspection confirmed that all required equipment was installed and operating properly on all four

emission units. Only one unit was in operation at the time of inspection. This unit was measuring a temperature of ~1510°F during the inspection.

The facility is required to have installed a continuous temperature monitoring device on each oven. From this device, temperature records of the secondary afterburner should be maintained for five years. Records were provided on May 11, 2023, for the period of January 1, 2023, through May 8, 2023, and are included with this report that confirm presence and operation of temperature monitoring equipment. These records demonstrate that operational temperature of the units is well above the required 1400°F whenever the units are in use. More records were not requested as the units record temperatures every five minutes, meaning the data for four units is extensive.

The facility is required to calibrate thermocouples for each chamber of each unit at least once per year as well as maintaining malfunction and maintenance records for each unit. Maintenance records were provided that confirm compliance with both requirements. As required by the permit, the facility maintains records of all materials processed in the burn-off ovens. These records were reviewed on site at the time of the inspection. The facility also supplied required documentation of all emission unit construction and capabilities regarding secondary afterburners, automatic temperature control systems, and interlock systems.

The FG is required to have four stacks, one for each oven. All four stacks were present and appeared to meet permitted dimensions. The stacks were not directly measured for safety reasons.

### **Exemptions**

This facility operates many welding and machining equipment for the forming and shaping of metal parts. This equipment is all exempt from air permitting requirements under Rule 285(2)(i) and Rule 285(2)(l)(vi).

This facility conducts multiple coating operations. Some operations utilize aerosol cans of paint for touch up work. This is exempt from air permitting requirements under Rule 287(2)(c) as the used amount is well under 200 gallons per year as demonstrated by provided usage and purchase records. The facility also has two powder coating operations, each with an associated curing oven. Each process is conducted within booths that are equipped with cyclones and baghouses that vent to the internal facility environment. Filters for the associated control equipment are replaced as needed and appeared to be properly installed and in good condition during the inspection. These operations are exempt from air permitting requirements under Rule 287(2)(d).

This facility has one small cold cleaner that is exempt from air permitting requirements under Rule 281(2)(h).

This facility has three boilers on site. All three boilers are rated at approximately 10 mmBtu. These boilers are exempt from air permitting requirements under Rule 282(2)(b)(i). With ratings at or above 10 mmBtu, two of the boilers are subject New Source Performance Standard (NSPS) 40 CFR Part 60 Subpart Dc due to having been installed after 1989. The third boiler is not subject as it was installed in 1969. Per the requirements of Subpart Dc, the AQD was notified initial startup of the boilers and the facility reports fuel usage to the Michigan Air Emissions Reporting System each year. As all boilers are operated with natural gas they are not subject to National Emissions Standard for Hazardous Air Pollutants (NESHAP) 40 CFR Part 63 Subpart JJJJJ.

**Conclusion**

At the conclusion of this inspection the facility appeared to be compliant with all permitted requirements as well as all other applicable air quality rules and regulations.

NAME Scott EvansDATE 5/31/2023SUPERVISOR HH