

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

N819459641

<b>FACILITY:</b> CREATIVE MERCHANDISING SYSTEMS INC		<b>SRN / ID:</b> N8194
<b>LOCATION:</b> 4044 BROCKTON DR SE, KENTWOOD		<b>DISTRICT:</b> Grand Rapids
<b>CITY:</b> KENTWOOD		<b>COUNTY:</b> KENT
<b>CONTACT:</b> Mark Stancliff , Plant Manager		<b>ACTIVITY DATE:</b> 08/26/2021
<b>STAFF:</b> April Lazzaro	<b>COMPLIANCE STATUS:</b> Non Compliance	<b>SOURCE CLASS:</b> MINOR
<b>SUBJECT:</b> Unannounced, scheduled inspection.		
<b>RESOLVED COMPLAINTS:</b>		

Air Quality Division staff April Lazzaro conducted an unannounced scheduled inspection of Creative Merchandising Systems Inc. (CMS). Accompanying AQD staff on the inspection was Mark Stancliff, Plant Manager.

**FACILITY DESCRIPTION**

CMS manufactures wood display cases for grocery, retail, and commercial businesses. The facility which began operations in January 2008 works with a combination of hardwood and plywood. A variety of woodworking equipment and finishing equipment are utilized. The company operates two paint booths under Permit to Install No. 6-09 and one paint booth pursuant to Rule 287(2)(c).

**COMPLIANCE EVALUATION**

The company has three spray booths used to apply solvent based stain and lacquer. Two booths were installed in 2008 and a third booth was installed in 2012. Each booth operates independently so stain and finish coats could be applied in any one of the three. The requirements of Permit to Install No. 6-09 were discussed with Mr. Stancliff, and I learned that this covers the two larger booths that are identified internally as booth 1 & 3. During a previous AQD inspection in 2016, Rule 287(2)(c) was identified as appropriate for booth #2.

Filters were installed and appeared well maintained in each booth. Mr. Stancliff said that the filters are changed once per week. During our discussions and observations, Mr. Stancliff confirmed that HVLP spray equipment is in use in booths 1 & 3, and booth 2 utilizes a kremlin air assisted airless spray gun.

No changes have been made to the stack heights for all three booths. Previous records indicate the stacks are 45 feet above ground which for booths 1 and 3 which indicates compliance with permit conditions.

The PTI includes an emission limit for the two booths identified in the permit as EUSprayBoothNorth & EUSprayBoothSouth, in a flexible group called FGSprayBooths. As previously noted, the facility refers to these as booths 1 & 3. Following the most recent AQD inspection, Mr. Stancliff has begun maintaining usage records on a per booth basis, which were readily available. Most stains are purchased in 5 gallon containers. A repco-lite blend solvent is used for cleaning.

PTI No. 6-09 requires records of volatile organic compound (VOC) emissions on a monthly and 12-month rolling time period. The company does not maintain VOC emission calculations in accordance with the permit. This is a violation of FGSprayBooths Special Condition No.'s VI.3 c & d. In addition, the company is not

**maintaining records of the VOC content of applied coatings in accordance with the permit. Therefore, a violation of Special Condition FG Spray Booths V.1 and VI.3.b will be cited. No emission limit exceedance is anticipated.**

**All of the company's woodworking equipment is exempt from permitting pursuant to Rule 285(2)(l)(vi)(C) because the equipment is exhausted through a fabric filter collector. The fabric filter has a rated air flow of around 42,000 cubic feet per minute. During the inspection, there were points of correction identified for the baghouse. The area around the baghouse was not very clean and had accumulation of wood materials present. I mentioned to Mr. Stancliff that every time the wood collection bins are emptied, the area should be inspected and cleaned as needed. Additionally, a focus on keeping wood particles out of the storm drain should be made. None of the wood was becoming airborne at the time of the inspection, however there was evidence that particles had been entering a storm drain. Mr. Stancliff stated he would clean up the wood residue within a week.**

**The control panel of the baghouse is equipped with a pressure drop gauge which read zero at the time of the inspection. The lines are likely plugged on the gauge. Mr. Stancliff confirmed that the baghouse is 100% recirculating air back into the plant. Zero air is being emitted into the ambient air. While this pressure drop reading is not a good indicator a violation will not be cited, because the baghouse was recirculating all the air back into the plant. No visible dust was circulating inside the facility. There are no requirements for the facility to use the pressure drop gauge to demonstrate compliance at this time, however I requested that it be made operational. Mr. Stancliff indicated that they plan to replace all the bags in the next year and that he would fix the gauge in the coming week.**

**The company also uses a small amount of wood adhesives including a starch based glue and a contact adhesive (Hybond). This adhesive usage has been identified as being exempt from permitting pursuant to Rule 287(2)(c). The other adhesives used is a water-based wood glue which is also exempt from permitting pursuant to Rule 287(2)(c). A record of material usage is being maintained by the facility for these areas but could be improved upon by generating monthly totals.**

**I have provided Mr. Stancliff with the AQD coatings spreadsheet that allows for a company to input materials and their weight, along with the VOC content in weight percent and it calculates emissions. The spreadsheet is also pre-populated with a format to display 12-month rolling total emissions. There did appear to be an "update" needed in the spreadsheet, but from what I could tell it did not affect the functionality. I reached out to the Environmental Support Division for help. I learned that they do not plan to conduct updates to the spreadsheet.**

**CMS may use up to 300 different colors of stain, and many are the same formulation, just a different color. In these cases, it would be sufficient for the facility to track total stain used where the VOC content is the same.**

## **SUMMARY**

**CMS was in non-compliance at the time of the inspection and a Violation Notice will be issued.**

NAME April Lazzaro

DATE 09/01/2021

SUPERVISOR HH