

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

N679131840

FACILITY: Grand Rapids Chair Company		SRN / ID: N6791
LOCATION: 1250 84Th St SW, BYRON CENTER		DISTRICT: Grand Rapids
CITY: BYRON CENTER		COUNTY: KENT
CONTACT: David Overholt , Vice President of Operations		ACTIVITY DATE: 10/09/2015
STAFF: Denise Plafcan	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT:		
RESOLVED COMPLAINTS:		

Denise Plafcan (DP) conducted an unannounced scheduled inspection to determine compliance with state and federal Air Quality rules and regulations and Opt-out PTI No. 112-13. DP drove around the area prior to entering the facility. There were no odors, fugitive emissions or opacity noted from the facility. DP met with, David Overholt, V.P. of Operations and Mark Feuerstien, Finish Technician, explained the purpose of the inspection and reviewed the Environmental Inspection brochure. Rick also participated in the plant inspection.

Grand Rapids Chair has been operating at this location since January 2014. The new plant combines all of their previous locations and operations into one site. . At the plant they have metal chair/furniture coating, wood chair/furniture coating, wood table top coating, assembly, welding, machining, and wood working. Metal coating consists of 2 metal powder coat lines, with one booth and one bake oven for each line. There is one metal wash system, which uses a 3 step phosphate metal cleaning solution and drying oven. Because of the phosphate the waste water is trucked off-site instead of flushing it into the drain system. They use Torrit dust collecton units inside and outside of the plant. For control of wood and metal dust respectively. The wood coating line has 1 stain booth, 1 sealer booth and 2 topcoat booths. Each booth has mat panel filters with sufficient draw to minimize particulate and all of the mat filters are replaced daily.

The company is possibly looking at making coating changes DP agreed to take a look at the MSDS for both the current coating and the new material to see if a Rule 285(b) exemption from Rule 201 would be an option.

Emission Unit ID	Emission Unit Description (Process Equipment & Control Devices)
EU-Chair	Wood and metal chair manufacturing operations consists of multiple spray booths with fabric filter and HVLP spray guns. Use of solvent based coatings (stain, sealer, topcoat(s)) and acetone as purge and cleanup solvents.
EU-Table	Wood table manufacturing operations consists of one spray booth with fabric filter, HVLP spray guns, and a drying oven. Use of solvent based coatings (stain, sealer, topcoat(s)) and acetone as purge and cleanup solvents.

Changes to the equipment described in this table are subject to the requirements of R 336.1201, except as allowed by R 336.1278 to R 336.1290.

FLEXIBLE GROUP SUMMARY TABLE

The descriptions provided below are for informational purposes and do not constitute enforceable conditions.

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FG-Chair&Table	Wood/metal chair and wood table manufacturing operations	EU-Chair, EU-Table
FG-Facility	All process equipment source-wide including equipment covered by other permits, grand-fathered equipment and exempt equipment.	NA

**FG-Chair&Table**

Wood/metal chair and wood table manufacturing operations

Emission Unit ID: EU-Chair, EU-Table

**POLLUTION CONTROL EQUIPMENT:** Spray booths equipped with fabric filters to control particulate matter

**EMISSION LIMITS**

Pollutant	Limit	Time Period / Operating Scenario	52 – week compliance records
VOCs	32.1 tpy	13 - four-week rolling time period, as determined at the end of each four-week period	17.8 tons January 2015 highest month combining both plants
Acetone	8.0 tpy	13 - four-week rolling time period, as determined at the end of each four-week period	0.026 tons January 2015 highest month combining both plants
Ethyl benzene (CAS No. 100-41-4)	2.5 tpy	13 - four-week rolling time period, as determined at the end of each four-week period	0.03 tons January 2015 highest month combining both plants
Xylene (CAS No. 1330-20-7)	90.2 lb/day	Calendar Day	25 pounds/day highest

**MATERIAL LIMITS**

Material	Limit	Time Period / Operating Scenario	COMPLIANCE
VOC Content of Coating - Topcoat	6.1 lb/gal (minus water) <sup>a</sup> as applied	Instantaneous	Less than 5 lb/gal (minus water as applied).
VOC Content of Coating - Stain	6.1 lb/gal (minus water) <sup>a</sup> as applied	Instantaneous	Less than 5 lb/gal (minus water as applied)..
VOC Content of Coating - Sealer	5.0 lb/gal (minus water) <sup>a</sup> as applied	Instantaneous	4.5 lb/gal (minus water as applied).

**PROCESS/OPERATIONAL RESTRICTIONS**

The permittee shall capture all waste topcoat, sealer, stain, purge and cleanup solvents (materials) and shall store them in closed containers. The permittee shall dispose of all waste materials in an acceptable manner in compliance with all applicable state rules and federal regulations. It appears that waste material is being handled appropriately.

The permittee shall dispose of spent filters in a manner which minimizes the introduction of air contaminants to the outer air. Spent filters appear to be being disposed of properly.

The permittee shall handle all VOC and / or HAP containing materials, in a manner to minimize the generation of fugitive emissions. The permittee shall keep containers covered at all times except when operator access is necessary. Materials are being handled to minimize fugitive emissions.

**DESIGN/EQUIPMENT PARAMETERS**

The permittee shall not operate FG-Chair&Table unless all respective exhaust filters are installed, maintained and operated in a satisfactory manner. They have double mat panel filters on the booths which minimizes any fugitive particulate

The permittee shall equip and maintain each spray booth of FG-Chair&Table with HVLP applicators or comparable technology with equivalent transfer efficiency. For HVLP applicators, the permittee shall keep test caps available for pressure testing. The attached e-mail confirms they have test caps on site.

**TESTING/SAMPLING**

No testing was requested or required as part of this compliance inspection.. Electronic letter requesting the use of manufacturer's formulation data was received on March 5, 2014.

**MONITORING/RECORDKEEPING**

Records and Material Safety Data Sheets were submitted electronically, see attached CD.

Stack Vent dimensions were not verified during this compliance inspection.

The following conditions apply Source-Wide to: FGFACILITY

**EMISSION LIMITS**

Pollutant	Limit	Time Period / Operating Scenario	COMPLIANCE
Each Individual HAP	Less than 9.0 tpy	13 - four-week rolling time period, as determined at the end of each four-week period	57 pounds aggregate HAPS for January through August the first 8 months of production.
Aggregate HAPs	Less than 22.5 tpy	13 - four-week rolling time period, as determined at the end of each four-week period	57 pounds aggregate HAPS for January through August the first 8 months of production.

**TESTING/SAMPLING**

The permittee shall determine the HAP content of any material as received and as applied, using manufacturer's formulation data. Upon request of the AQD District Supervisor, the permittee shall verify the manufacturer's HAP formulation data using EPA Test Method 311. Testing was not requested as part of this inspection.

**MONITORING/RECORDKEEPING**

Records shall be maintained on file for a period of five years. (R 336.1201(3))

The permittee shall complete all required calculations in a format acceptable to the AQD District

Supervisor by the 15<sup>th</sup> day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. Toxic, HAP and VOC records are being maintained electronically by the supplier (Repolite) based on purchases.

Based on the physical inspection and records provided, the facility appears to be in compliance with state and federal Air Quality rules and regulations and Opt-out PTI 112-13.

NAME Devin Deuce

DATE 12-6-15

SUPERVISOR PAB