

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

N556927247

FACILITY: Haworth, Inc. - Big Rapids Components-steel & wood		SRN / ID: N5569
LOCATION: 300 N Bronson, BIG RAPIDS		DISTRICT: Grand Rapids
CITY: BIG RAPIDS		COUNTY: MECOSTA
CONTACT: Brandy Wright , Mfg. Quality Engineer		ACTIVITY DATE: 09/05/2014
STAFF: Denise Plafcan	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR
SUBJECT:		
RESOLVED COMPLAINTS:		

Denise Plafcan (DP) conducted an announced scheduled inspection of Haworth, Inc. Big Rapids Components in Big Rapids, Michigan. Due to the location of the facility DP contacted Jim Kozminski (JK), Corporate Environmental Manager and Brandy Wright (BW), facility engineer. The purpose of this inspection was to determine compliance with ROP No. MI-ROP-N5569-2014, and State and Federal Air Quality rules and regulations. DP met with BW for an initial discussion and handed-out the Environmental Inspections: Rights and Responsibilities pamphlet. BW was also the escort on the inspection.

Before and after inspection the facility DP drove around the two plants, no odors were detected, no visible particulate problems and no unusual operating conditions noted.

This facility manufactures metal and wood office furniture in two separate buildings. They have 550 employees and run a first shift and third shift 5 days a week. The wood furniture manufacturing and coating building is to the north and the metal furniture manufacturing and coating building is to the south. The entire facility is a minor source for HAPs and would not be considered a ROP source except for the once-in-always-in policy of the NESHAP JJ. The wood plant uses UV and water based coatings and the metal plant uses cathodic E-coat and powder coating.

The inspection began in the metal furniture building which includes metal stamping, welding, cleaning and assembly operations, a cathodic E-coat dip tank and associated ovens, a powder coat line and associated oven, a cold cleaner, and two rack burn-off ovens controlled by individual thermal oxidizers that use a Rule 290 exemption.

The wood furniture building includes wood machining and manufacturing equipment, and a wood coating line including water borne stain and ultraviolet (UV) top coat. In the past two years they have added a fifth stain booth to the line, a trim stain and UV coating line and an additional water borne stain and oven out on the floor next to the sanding operation. All coatings in the wood building are water borne stains and UV top coats. This facility also has three baghouses and two cold cleaners.

All reporting requirements for semiannual and annual compliance, excursions and exceedances, monitoring downtime, NSPS EE and NESHAP JJ are being submitted as required.

All Sections with No Applicable requirements were removed from this inspection report, which accounts for some areas with nonconsecutive numbering.

SOURCE-WIDE CONDITIONS

I. EMISSION LIMIT(S)

- Each Individual HAP 9 tons per year based upon a 12-month rolling time period as determined at the end of each calendar month. As of August 2014 they are art less than 0.2 tons per year for aggregate HAPS
- Aggregate HAPs 22 tons per year based upon a 12-month rolling time period as determined at the end of each calendar month. As of August 2014 they are art less than 0.2 tons per year for aggregate HAPS

VI. MONITORING/RECORDKEEPING

Records are being maintained to demonstrate compliance.

IX. OTHER REQUIREMENT(S) Semiannual and annual compliance reports are being submitted as required.

EMISSION UNIT SUMMARY TABLE

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device (s))	Installation Date/ Modification Date	Flexible Group ID
EUECOAT	Metal furniture e-coat paint process consisting of a dip tank, rinse tank, and a natural gas fired bake oven rated at 3.0 MMBtu/hr.	06/20/1995	FGNSPSEE
EURACKBURN1	Rack burnoff oven used for incinerating excess coating off part racks used on the powder coat line process. Oven is rated at 780,000 Btu/hr to a temperature of 750°F. Emissions are controlled by an afterburner.	06/20/1995	FGRULE290
EURACKBURN2	Rack burnoff oven used for incinerating excess coating off part racks used on the powder coat line. Oven is rated at 780,000 Btu/hr to a temperature of 750°F. Emissions are controlled by an afterburner.	07/12/1996	FGRULE290
EUWOODCTG	Wood coating operations exempt under R 336.1290, including the UV wood coating line comprised of one UV-topcoat application unit, one UV-light cure zone, one preheat chamber, five manual spray booths and two cure ovens.	NA	FGNESHAPJJ FGRULE290
EUDUSTCOLL1	A 50,000 cfm baghouse used to collect particulate from the woodworking operations at the wood furniture building. Externally exhausted only part of the year.	03/19/2000	FGDUSTCOLLS FGDUSTCOLLSCAMPLAN
EUDUSTCOLL2	A 50,000 cfm baghouse used to collect particulate from the woodworking operations at the wood furniture building. Externally exhausted only part of the year.	03/19/2000	FGDUSTCOLLS FGDUSTCOLLSCAMPLAN
EUDUSTCOLL3	A 50,000 cfm baghouse used to collect particulate from the woodworking operations at the wood furniture building. Externally exhausted only part of the year.	1/1/2002	FGDUSTCOLLS FGDUSTCOLLSCAMPLAN
EUPARTSWASH1	Cold cleaner which is exempt from the requirements of R 336.1201 pursuant to R 336.1281(h).	06/20/1995	FGCOLDCLEANERS
EUPARTSWASH2	Cold cleaner which is exempt from the requirements of R 336.1201 pursuant to R 336.1281(h).	06/20/1995	FGCOLDCLEANERS
EUPARTSWASH3	Cold cleaner which is exempt from the requirements of R 336.1201 pursuant to R 336.1281(h).	06/20/1995	FGCOLDCLEANERS
EUEURULE290	Any existing or future emission unit that emits air	NA	FGRULE290

	contaminants which are exempt from the requirements of R 336.1201 pursuant to R 336.1290		
EUEMERGENCYGEN	Existing Stationary Engine <500 HP constructed before 2006 subject to 40 CFR, Part 63, Subpart ZZZZ	1/1/1996	FGEMERGENCYGEN

EUECOAT EMISSION UNIT CONDITIONS

DESCRIPTION

Metal furniture e-coat paint process consisting of a dip tank, rinse tank, and a natural gas fired bake oven rated at 3.0 MMBtu/hr.

Flexible Group ID: FGNSPSEE

I. EMISSION LIMIT(S)

- VOC 16.8 pounds per hour based upon a monthly calendar averaging period as determined at the end of each calendar month Metal e-coat process. Highest month for 2014 was 0.50 pounds per hour see attached spreadsheet and electronic data).
- VOC 52.6 tonsper year based upon a 12-month rolling time period as determined at the end of each calendar month Metal e-coat process. 2.0 tons reported through August 2014 (see attached spreadsheet and electronic data).

II. MATERIAL LIMIT(S)

- VOC 2.75 pounds per gallon of coating (minus water) as applied Instantaneous Metal e-coat process. Less than 0.6 pounds per gallon see attached spreadsheet and electronic data).

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years

No testing has been conducted since this is the first year of the new ROP. No additional testing was requested as part of this compliance inspection.

VI. MONITORING/RECORDKEEPING

Records are being maintained to demonstrate compliance.

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Stack dimensions were not evaluated as part of this compliance inspection.
SVBAKEOVEN1	19 ²	
SVBAKEOVEN2	28	
SVDIPTANK	18 ²	
SVRINSE	24 ²	

IX. OTHER REQUIREMENT(S)

- The permittee shall implement and maintain an acceptable Preventative Maintenance Plan. No modifications have been made to the emission unit or PMP

D. FLEXIBLE GROUP CONDITIONS

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
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		Emission Unit IDs
FGNSPSEE	This group consists of operations that apply adhesives and coating to metal furniture and are subject to Rule 610 and 40 CFR, Part 60, Subpart EE.	EUECOAT
FGDUSTCOLLS	Three 50,000 cfm baghouses used to collect particulate from the woodworking operations at the wood furniture building. Externally exhausted only part of the year.	EUDUSTCOLL1 EUDUSTCOLL2 EUDUSTCOLL3
FGDUSTCOLLSCAMPLAN	CAM plan for the three 50,000 cfm baghouses used to collect particulate from the woodworking operations at the wood furniture building.	EUDUSTCOLL1 EUDUSTCOLL2 EUDUSTCOLL3
FGNESHAPJJ	This group consists of operations covered by NSR permits, grandfathered equipment, and exempt equipment that apply surface coating to wood furniture and are subject in 40 CFR, Part 63, Subpart JJ.	EUWOODCTG
FGRULE290	Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rules 278 and 290.	EURACKBURN1 EURACKBURN2 EUWOODCTG EURULE290
FGCOLDCLEANERS	Any cold cleaner that is grandfathered or exempt from Rule 201 pursuant to Rule 278 and Rule 281(h) or Rule 285(r)(iv). Existing cold cleaners were placed into operation prior to July 1, 1979. New cold cleaners were placed into operation on or after July 1, 1979.	EUPARTSWASH1 EUPARTSWASH2 EUPARTSWASH3
FGEMERGENCYGEN	For emergency spark ignition engines subject to 40 CFR, Part 63, Subpart ZZZZ.	EUEMERGENCYGEN

FGNSPSEE FLEXIBLE GROUP CONDITIONS

DESCRIPTION

This group consists of applicable operations that apply adhesives and coating to metal furniture and are subject to Rule 610 and 40 CFR, Part 60, Subpart EE.

Emission Unit: EUECOAT

I. EMISSION LIMIT(S)

1. VOC 3.0 pounds per gallon of coating as applied, minus water averaged on a calendar day basis for Metal furniture coating and adhesive equipment. Less than 0.6 pounds per gallon of coating
2. VOC 0.9 kilogram per liter (7.5 pound per gallon) of solids as applied a monthly basis per line Metal furniture coating equipment. Less than 0.7 pounds per gallon of solids.

VI. MONITORING/RECORDKEEPING

Records are being maintained to demonstrate compliance.

FGDUSTCOLLS FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Three 50,000 cfm baghouses used to collect particulate from the woodworking operations at the wood furniture building. Externally exhausted only part of the year.

Emission Units: EUDUSTCOLL1, EUDUSTCOLL2, EUDUSTCOLL3

Three particulate dust collection systems

I. EMISSION LIMIT(S) 1.

Particulate 0.01 pound per 1,000 pounds of exhaust gases, calculated on a dry gas basis.

III. PROCESS/OPERATIONAL RESTRICTION(S)

The permittee shall not operate the woodworking equipment unless the appropriate dust collectors are installed and operating properly. All three dust collectors were operating and the area around the dust collectors was very clean.

VI. MONITORING/RECORDKEEPING

Records are being maintained to demonstrate compliance.

IX. OTHER REQUIREMENT(S)

The permittee shall implement and maintain an acceptable Preventative Maintenance Plan and Malfunction Abatement Procedures. Any modifications to the plan shall be submitted to the AQD District Supervisor for review. An acceptable plan is being implemented and is part of CAM. Records were reviewed on site.

FGDUSTCOLLSCAMPLAN FLEXIBLE GROUP CONDITIONS

DESCRIPTION

CAM plan for the three 50,000 cfm baghouses used to collect particulate from the woodworking operations at the wood furniture building.

Emission Units: EUDUSTCOLL1, EUDUSTCOLL2 and EUDUSTCOLL3

POLLUTION CONTROL EQUIPMENT

Three pulse-jet pneumatic baghouses operated under negative pressure which filter approximately 50,000 cfm of air each.

VI. MONITORING/RECORDKEEPING

Records are being maintained to demonstrate compliance and were reviewed on site.

IX. OTHER REQUIREMENTS

The permittee shall notify the appropriate AQD District Office of the need to modify the monitoring plan if the approved monitoring plan is found to be inadequate and shall submit a proposed modification to the plan if appropriate. No modifications have been made.

The permittee shall comply with all applicable requirements of 40 CFR, Part 64. The facility appears to be in compliance with CAM requirements.

FGNESHAPJJ FLEXIBLE GROUP CONDITIONS

DESCRIPTION

This group consists of operations covered by NSR permits, grandfathered equipment, and exempt equipment that apply surface coating to wood furniture and are subject in 40 CFR, Part 63, Subpart JJ.

Emission Unit: EUWOODCTG

I. EMISSION LIMIT(S)

1. The permittee shall comply with all applicable limits established in 40 CFR 63.802
2. Volatile HAPSSee Material Limit Table Below*Instantaneous FGNESHAPJJ

II. MATERIAL LIMIT(S)

1. The permittee shall comply with all applicable limits established in 40 CFR 63.802.

Material *Use compliant finishing materials	Limit Maximum lb VHAP/lb solids, as applied	Time Period/ Operating Scenario	Compliance
stains	1.0	Instantaneous	NO HAPS are used in wood finishing.
washcoats	0.8	Instantaneous	
sealers	0.8	Instantaneous	

topcoats	0.8	Instantaneous
basecoats	0.8	Instantaneous
enamels	0.8	Instantaneous
thinners	NA	Instantaneous

III. PROCESS/OPERATIONAL RESTRICTION(S)

- All emission units subject to 40 CFR 63.803, Subpart JJ shall comply with the Work Practice Standards noted in 40 CFR 63.803. Even though no HAPS are used the Work Practice Standards are being implemented.

V. TESTING/SAMPLING

No additional testing required as part of this compliance inspection.

VI. MONITORING/RECORDKEEPING

Records are being maintained to demonstrate compliance.

IX. OTHER REQUIREMENT(S)

- The permittee is meeting all applicable requirements of 40 CFR, Part 63 Subparts A and JJ.

FGRULE290 FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rules 278 and 290.

Emission Units: EURACKBURN1, EURACKBURN2, EUWOODCTG, EURULE290

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years.

- The permittee shall maintain records of the following information for each emission unit for each calendar month using the methods outlined in the DEQ, AQD Rule 290, Permit to Install Exemption Record form (EQP 3558) or an alternative format that is approved by the AQD District Supervisor. a. Records identifying each air contaminant that is emitted.

The rack burn-off ovens use a Rule 290 exemption for compliance. The use of this exemption is based on not exceeding 120 batches per month and with a five day a week schedule they only run a maximum of 4 batches a day or 8 to 10 per week, well below the Rule 290 exemption limit. Both ovens were not operating during the inspection however both circular charts indicated the ovens and afterburners were being operated properly with the after burner between 1400-1600°F. Calibration is done annually and the last calibration of the ovens and afterburners was on May 14, 2014.

FGCOLDCLEANERS FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Any cold cleaner that is grandfathered or exempt from Rule 201 pursuant to Rule 278 and Rule 281(h) or Rule 285(r)(iv). Existing cold cleaners were placed into operation prior to July 1, 1979. New cold cleaners were placed into operation on or after July 1, 1979.

Emission Units: EUPARTSWASH1, EUPARTSWASH2, EUPARTSWASH3

there are three parts washers between the two plants EUPARTSWASH1, EUPARTSWASH2 and EUPARTSWASH3 one uses mineral spirits one uses Simple Green and the third uses a detergent product.

FGEMERGENCYGEN FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Any emergency generator applicable to 40 CFR, Part 63, Subpart ZZZZ: National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. Company did provide records but they were not evaluated as part of this compliance inspection since Michigan is not delegated authority.

Based on the physical inspection and the records used the facility appears to be in compliance with state and federal Air Quality rules and regulations.

NAME Anise O'Leary

DATE 9-26-14

SUPERVISOR PAB

