

P0808
 FY2018 Insp

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

P080844176

FACILITY: Rosati Specialties		SRN / ID: P0808
LOCATION: 24200 Capital Blvd., CLINTON TWP		DISTRICT: Southeast Michigan
CITY: CLINTON TWP		COUNTY: MACOMB
CONTACT: Don Rosati , President and Owner		ACTIVITY DATE: 03/21/2018
STAFF: Iranna Konanahalli	COMPLIANCE STATUS: Non Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: FY 2018 Scheduled inspection of Rosati Specialties, LLC ("Rosati")		
RESOLVED COMPLAINTS:		

Rosati Specialties, LLC (P0808)
24200 Capital Boulevard
Clinton Township, Michigan, 48036-1335

RosatiSpecialties.com

VN: AQD issued Violation Notice (VN), dated September 12, 2017 for failure to comply with Rules 336.1201 (Permit-to-Install) & 336.1210 (ROP) and federal NESHAP / MACT 4Q (Wood Building Products Surface Coating). AQD received Violation Notice response letter dated September 20, 2017. The letter, in essence, claimed that the violations did not occur because AQD issued the permit being aware that the installations of the coating process equipment in two buildings happened prior to obtaining a permit. This claim is incorrect.

CO: AQD is negotiating a consent order settlement to resolve the above violations.

702 BACT: Rule 336.1620 RACT VOC standard \leq (12.0 pounds of VOC per 1,000 square feet of coated natural finish plywood product on a daily average basis). Rule 336.1702 BACT \leq (8.0 pounds of VOC per 1,000 square feet of coated natural finish plywood product on a daily average basis).

P0808: SRN covers wood coating operations in two adjacent buildings: 24200 Capital Boulevard (Building 1, installed coating processes in 2006) and 24300 Capital Boulevard (Building 2, installed coating processes in 2011).

Permit-to-Install (PTI): AQD issued PTI No. 38-17 (ROP [VOC] and HAP / MACT Synthetic Minor permit) dated May 19, 2017 (AQD-Permit staff: Daniel Schwanik & David Thomas), for predominantly wood parts surface coating (both roll-coat and spray-coat). The coating processes commenced operation prior to obtaining a permit in both the buildings: 24200 Capital Boulevard (Building 1, 2006) and 24300 Capital Boulevard (Building 2, 2011). Hence, Rosati operated an ROP and MACT 4Q Major Source without a federal Title V (RO) and Rule 336.1201 permits. PTI No. 38-17 allows emissions up to: 54 tpy VOC, 8.9 tpy single HAP and 22.4 tpy Aggregate HAPs. Prior to obtaining a permit, Rosati was a major PSD (PTE > 250 tpy VOC) source as well based upon information in the permit application.

Subject to (not a major source for HAPs only after Rosati obtained a Synthetic Minor Permit in May 2017 [not before May 28, 2003, first compliance date for new

{ construction after December 09, 1991} Major MACT source]; before that Rosati was deemed to be a Major Source for VOC, PSD and MACT): Major Source NESHAP / MACT 4Q, 40 CFR Part 63, National Emission Standards for Hazardous Air Pollutants: Surface Coating of Wood Building Products; Final Rule, Page 31746, Federal Register / Vol. 68, No. 102 / Wednesday, May 28, 2003 / Rules and Regulations / Final rule. EFFECTIVE DATE: May 28, 2003.

MACT 4Q applicability: A non-major or area HAP source, i.e., actual and potential annual emissions are less than 10 tons of any single HAP and less than 25 tons of all HAP combined, is not subject to the MACT 4Q standards. Major MACT sources are defined as those that emit or have the potential to emit at least 10 tons per year of any single HAP or 25 tons per year of any combination of HAP. Rosati obtained, on May 19, 2017 [not before May 28, 2003, first compliance date for new [construction after December 09, 1991] Major MACT source], a Synthetic Minor permit (PTI No. 38-17). A major HAP source is subject to NESHAP / MACT 4Q. First compliance date: May 28, 2003, if initial startup is before May 28, 2003, for new source (commenced construction or reconstruction on or after December 09, 1991). For an existing (commenced construction or reconstruction before December 09, 1991) major source, three years after May 28, 2003.

Once-in-Always-in [OIAI] Policy: According to May 16, 1995, EPA memorandum entitled "Potential to Emit for MACT Standards – Guidance on Timing Issues" from John Seitz, Director of OAQPS, Major Sources of HAPs on the "first compliance date" are required to comply permanently with the applicable MACT standard to ensure that maximum achievable reductions in toxic emissions are achieved and maintained. In other words, in order not to be a major source, the company should have obtained federally enforceable permit limiting its potential-to-emit (PTE) below major source threshold for HAPs before the first compliance date (timeliness). In addition, Clean Air Act (CAA), as amended, requires all major sources to obtain a Title V (RO) permit

Once-in-Always-in [OIAI] Policy Repeal: On January 3, 2007, US EPA has proposed (Page 69, Federal Register / Vol. 72, No. 1 / Wednesday, January 3, 2007 / Proposed Rules) to replace this policy (May 16, 1995, EPA memorandum entitled "Potential to Emit for MACT Standards – Guidance on Timing Issues" from John Seitz) so that a major MACT source may become an area source any time.

OIAI policy repeal: Effective on February 8, 2018, US EPA Issuance ("Reclassification of Major Sources as Area Sources Under Section 112 of the Clean Air Act") and withdrawal ("Potential to Emit for MACT Standards—Guidance on Timing Issues.") of guidance memorandums, Page 5543, Federal Register /Vol. 83, No. 27 /Thursday, February 8, 2018 / Rules and Regulations.

As is explained in the memorandum, the plain language of the definitions of "major source" in CAA section 112(a)(1) and of "area source" in CAA section 112(a)(2) compels the conclusion that a major source becomes an area source at such time that the source takes an enforceable limit on its potential to emit (PTE) hazardous air pollutants (HAP) below the major source thresholds (i.e., 10 tons per year (tpy) of any single HAP or 25 tpy of any combination of HAP). In such circumstances, a source that was previously classified as major, and which so limits its PTE, will no longer be subject either to the major source MACT or other major source requirements that were applicable to it as a major source under CAA section 112. The guidance signed on

January 25, 2018, supersedes that which was contained in the May 1995 Seitz Memorandum.

MAERS: Rosati will begin reporting effective MAERS-2018 season.

On March 21, 2018, I, accompanied by AQD engineers Bognar and Forth and AQD intern Zarnab, conducted an annual level-2 **SM (ROP & MACT) CMS FY 2018 Scheduled inspection** of Rosati Specialties, LLC ("Rosati"), a wood surface coating facility, located at 24200 Capital Boulevard (Building 1, since 2006) and 24300 Capital Boulevard (Building 2, since 2011), Clinton Township, Michigan, 48036-1335. The inspection was conducted to determine compliance with the Federal Clean Air Act; Article II, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451; Michigan Department of Environmental Quality, Air Quality Division (MDEQ-AQD) administrative rules; and PTI No. 38-17.

During the FY 2018 inspection, Mr. Don Rosati (Phone: 586-783-3866; Fax: 586-463-5624; Cell: 313-475-0737; E-mail: don@RosatiSpecialties.com), President and Owner, assisted me.

Mr. Mathew J. Germane (Phone: 248-773-7986-ext. 19; Fax: NA; Cell: 810-449-9366; E-mail: Matt.Germane@ergrp.net), PE, Sr. Engineer, was also present during the inspection. Ms. Mala C. Hettiarachchi (Phone: 248-773-7986-ext. 23; Fax: 248-924-3108; Cell: 248-949-5671; E-mail: Mala.Hettiarachchi@ergrp.net), Ph. D., PE, Project Engineer, was not present due to family emergency but available via phone. Ms. Hettiarachchi is writing MS Excel spreadsheet for the permit required compliance calculations. Both Ms. Hettiarachchi and Mr. Germane are with Environmental Resources Group (ERG) of Wixom, Michigan.

Mr. Steven C. Kohl (Phone: 248-784-5141; Fax: 248-603-9741; Cell: 248-568-1123; E-mail: sKohl@wnj.com), Attorney-at-Law, Warner Norcross & Judd, LLP, of Southfield, MI 48075-1318, is assisting Rosati with legal matters.

Founded in 2000, Rosati Specialties, LLC ("Rosati") is an architectural and wood finishing (coating) company serving predominantly millwork finishing companies. Rosati specializes in *Flat Panel* finishing and *Architectural Wood* finishing:

1. Architectural grade door skins
2. Architectural flush and panel wood doors
3. Prefinished plywood of any thickness
4. Cross grain panels
5. Cabinet components
6. Drawer components
7. Custom stain matching, etc.

PTI No. 38-17 (ROP [VOC] and HAP / MACT Synthetic Minor permit)

Rosati installed and operated coating processes in two buildings (24200 Capital Boulevard [Building 1, 2006] and 24300 Capital Boulevard [Building 2, 2011]) prior to obtaining a permit-to-install. Hence, prior to obtaining PTI No. 38-17 (ROP [maximum allowable VOC: 54 tpy] and HAP [maximum allowable HAP: 8.9 tpy single HAP and 22.4 tpy Aggregate HAPs] /

MACT Synthetic Minor permit) dated May 19, 2017, Roasati was deemed to be major source for PSD, ROP and MACT.

Rosati is located in Macomb County, which is in attainment for all NAAQS criterial pollutants. The permit consists of the following emission units (EU) and flexible groups (FG):

EMISSION UNIT SUMMARY

Emission Unit ID	Emission Unit Description (Process Equipment & Control Devices)	Flexible Group ID
EU-Spray Booth	Manual (hand-held) spray booth to apply lacquer coating to wood parts, and to apply touch-up coating to wood parts which were coated in other lines. This booth is equipped with an exhaust filter to control particulate emissions from the spray coatings and is located in Building #1 (24200 Capital Blvd).	FG-DGME
Building 1: Back-draft filter system for the spray booth (12 ft. W * 10 ft. D * 10 ft. H) is operating properly. This booth is hardly used. The coatings used in the booth are both solvent-based and water-based.		
EU- Roll Coat	<p>A conveyORIZED flat wood panel roll coating operation consisting of one stain roll coat line and one ultraviolet (UV) roll coat line. All panels are processed through both lines.</p> <p>The stain roll coat line consists of one (1) belt sander, two (2) stain roll coaters to coat each side of the panels, stain wiping brushes, and a jetted air infrared curing oven.</p> <p>The UV roll coat line consists of a series of two (2) belt sanders, four (4) roll coaters to apply UV basecoat and topcoat to both sides of the panels, and four (4) UV curing ovens which follow each individual roll coater.</p> <p>To control particulate emissions, there is one dust collector for the belt sander associated with the stain roll coater and one dust collector for the two (2) belt sanders associated with UV roll coater.</p> <p>This equipment is located in Building #1 (24200 Capital Blvd).</p>	FG-DGME
In all, in Building 1, two (2) roll coat lines are present: stain roll coat line & UV roll coat line. In all, in Building 1, two (2) dust collectors are present; one for each line (stain & UV).		
EU-RSL Boiler	0.5 MMBtu/hr natural gas-fired boiler to provide indirect heating for the oven associated with the stain roll coater located in Building #1 (24200 Capital Blvd).	NA
EU-Spray Line	Conveyorized miscellaneous wood parts coating line consisting of one belt sander, one spray booth machine, one flash-off curing oven, one jetted air infrared curing oven, and one UV oven. The spray booth is equipped with an exhaust filter to control particulate emissions from the spray coatings, and a shared dust collector controls the particulate emissions from the belt sander. This equipment is located in Building #2 (24300 Capital Blvd).	FG-Building2

Emission Unit ID	Emission Unit Description (Process Equipment & Control Devices)	Flexible Group ID
EU-Molding Line	Conveyorized miscellaneous wood parts coating line consisting of one brush sander and one spray booth machine. The spray booth is equipped with an exhaust filter to control particulate emissions from the spray coatings. A shared dust collector controls the particulate emissions from the brush sander. This equipment is located in Building #2 (24300 Capital Blvd).	FG-Building2, FG-DGME
In all, in Building 2, two (2) lines are present: spray line & molding line. In all, in Building 2, one (1) dust collector is present; one for both lines (Spray & Molding).		
EU-SL Boiler	0.5 MMBtu/hr natural gas-fired boiler to provide indirect heating for the ovens associated with EU-Spray Line located in Building #2 (24300 Capital Blvd).	NA

FLEXIBLE GROUP SUMMARY

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FG-Building2	Two (2) conveyorized miscellaneous wood parts spray coating lines located in Building #2 (24300 Capital Blvd).	EU-Spray Line, EU-Molding Line
FG-DGME	Dipropylene glycol monobutyl ether (CAS No. 29911-28-2) emissions from the roll coat line and the two (2) spray coating lines.	EU-Roll Coat, EU-Spray Booth, EU-Molding Line
FGFACILITY	All process equipment source-wide including equipment covered by other permits, grand-fathered equipment and exempt equipment.	The purpose of FGFACILITY is to limit HAP emissions
The boilers (2: 0.50 MM BTU per hour heat input design capacity each) were included in this permit because the VOC projected emissions are just over 50 tpy, which is greater than the VOC significance level of 40 tpy. Per Rule 278, the boilers cannot be exempt as they are part of a project with greater than significant emissions.		

Rosati operates wood products coating processes in two buildings (24200 Capital Boulevard [Building 1, 2006] and 24300 Capital Boulevard [Building 2, 2011]). In all, three dust collectors are present: two Torit Dust Collectors (one with 32 cartridge filters for UV RollCoat line, consisting of two belt sanders and four roll coaters, and the other with 24 cartridge filters for stain line, consisting of one belt sander and two stain roll coaters) outside Building 1 and one Torit Downflow Dust Collector (24 cartridge filters for Spray and Molding lines) outside Building 2. The dust collectors are for, predominantly, saw dust particulate emissions from sanders. Each dust collector is equipped with two (2) 55-gallon drums as hopper for collected dust. In each dust collector, a pulse-jet air system is present for cleaning filters.

Building 1, 24200 Capital Boulevard (started coating in 2006)

Three sanders and two dust collectors are present in Building 1; one dust collector for each line. In building 1 two lines are present: one stain line and one UV line (EU-RollCoat for two lines).

Building 1 Stain line (EU-RollCoat – first line of two lines).

Raw wood is sanded using Heesmann sander. Raw wood is rinsed with water using Sorbini roll coater. Water-based stain is applied using Sorbini roll coater. Two brushes brush stain to spread stain and brushes are frequently cleaned with acetone. One stain oven (Cefla Finishing) cures stain. Heat for Cefla oven is provided by 0.5 MM BTU per hour boiler. After staining, wood product goes to UV line.

Building 1 UV line (EU-RollCoat – second line of two lines)

One Costa sander is present. Costa sander is used only if raw wood is fed and not if wood is finished in stain line, where sanding is done already. Hence, Costa sander is idle most the times. Wood is roll-coated using 100% solid UV coating; yet coating can flow. Wood is cured in an oven using UV light. Coating is applied using two roll coaters that are in one Sorbini machine; wet-on-wet coating on same side. Wood is cured using UV light. Wood is sanded using Heesmann sander. Wood is roll coated using Sorbini machine. Wood is cured using an UV oven. Two UV coats (basecoat & topcoat) in sequence.

Building 1 Spray booth (EU-SprayBooth)

One spray booth (12 ft. W * 10 ft. D * 10 ft. H) with a back-draft filter system is present. The booth has low production. Only specialty items are coated in the booth. Typically, lacquers are sprayed in the booth. Also, water-based primer and basecoat are sprayed. In addition, solvent-based clearcoat is sprayed.

Building 2, 24300 Capital Boulevard (started coating in 2011)

All coatings used in Building 2 (EU-SprayLine and EU-MoldingLine) are water-based. One Torit Downflow Dust Collector serves this building. Building 2 mostly is used as warehouse. In Building 2, two lines are present: Spray Line and Molding Line.

Building 2 Spray Line (EU-SprayLine)

Wood is sanded using Heesmann sander. Dust is blown off manually if necessary using compressed air and blow-off area is equipped with its own Donaldson Torit filter (2 cartridges). Wood is coated using Venjakob automatic reciprocator spray machine consisting of 4 layers of exhaust filters for overspray particulate matter. One Venjakob flash off oven flashes off water. Wood is cured in Venjakob jetted air oven. 0.5 MM BTU per hour boiler provides heat needed. Wood is cured using UV oven. If needed, the other side of wood is processed in the same line by flipping it.

Building 2 Molding Line (EU-MoldingLine)

Wood is sanded. Wood is coated using water-based coatings.

PTI No. 38-17 compliance

It may be noted that the calculations spreadsheet is still being developed. Coating and solvent usage data is NOT available for CY 2017. Estimates of the usage for permit application were made using purchase records. Based upon FY 2018 inspection, the operators are keeping logs of coating and solvent usage for each process / coating unit. From these logs, the spreadsheet is populated.

PTI No. 38-17, EU-SprayBooth

0.194 tons per 3 months Jan-Mar 2018 (PTI No. 38-17,EU-SprayBooth, I. limit: 10.0 tpy). Actual highest VOC content coating: **6.9** pounds of VOC per gallon (PTI No. 38-17,EU-SprayBooth, II limit:VOC content of coating materials: 6.9lbs./gal (minus water) as applied).The back-draft exhaust filters are installed, maintained and operated properly (PTI No. 38-17,EU-Spray Booth, IV.1: exhaust filters). HVLP guns are used (PTI No. 38-17,EU-SprayBooth, IV.2: HVLP guns). Formulation / SDS VOC content is used (PTI No. 38-17,EU-SprayBooth, V.1: US EPA RM24). The calculation and records spreadsheet has records for Jan-Mar 2018 (PTI No. 38-17,EU-SprayBooth, VI.1-3: Records and calculations).

PTI No. 38-17, EU-RollCoat (see also FG-DGME)

A conveyorized flat wood panel roll coating operation consisting of one stain roll coat line and one ultraviolet (UV) roll coat line. All panels are processed through both lines.

The **stain roll coat line** consists of a belt sander, two (2) stain roll coaters to coat each side of the panels, stain wiping brushes, and a jetted air infrared curing oven.

The **UV roll coat line** consists of a series of two (2) belt sanders, four (4) roll coaters to apply UV basecoat and topcoat to both sides of the panels, and four (4) UV curing ovens which follow each individual roll coater.

To control particulate emissions, there is one dust collector for the belt sander associated with the stain roll coater and one dust collector for the two (2) belt sanders associated with UV roll coater. In all, two (2) dust collectors are present outside Building #1.

This equipment is located in Building #1 (24200 Capital Blvd).

EU-RollCoat, I. Emission limits

Pollutant	Limit	Time Period / Operating Scenario	Calculated emissions for 3 months Jan-Mar 2018
1. VOC	25.0 tpy	12-month rolling time period as determined at the end of each calendar month	1.2 Tons per 3-mo
2. Acetone	14.0 tpy	12-month rolling time period as determined at the end of each calendar month	1.09 Tons per 3-mo
3. VOC	8.0 lbs. / 1,000 square feet of coated finished product from natural finish hardwood plywood panels	Daily volume weighted average	3.55 Pounds per 1,000 sq. ft. (max)

EU-Roll-Coat dust collectors (2: one each for stain roll coat line [one belt sander & two stain coatersto coat each side of the panels, stain wiping brushes, and a jetted air infrared curing oven] and UV roll coat line [two belt sanders & four UV roll coatersto apply UV basecoat and topcoat to both sides of the panels followed by four (4) UV curing ovens]), for belt sanders, are installed, maintained and operated in a satisfactory manner (PTI No. 38-17, EU-RollCoat, IV. 1). Formulation / SDS VOC content is used (PTI No. 38-17, EU-RollCoat, V. 1: US EPA RM24). The calculation and records spreadsheet has records for Jan-Mar 2018 (PTI No. 38-17,EU-RollCoat, VI.1-5: Records and calculations).

PTI No. 38-17, FG-Building2 (EU-Spray Line, EU-Molding Line)

Two (2) conveyORIZED miscellaneous wood parts spray coating lines located in Building #2 (24300 Capital Blvd).One Torit Downflow Dust Collector for the spray booths and a shared dust collector for the sanders.

PTI No. 38-17, FG-Building2, I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Calculated emissions for 3 months Jan-Mar 2018
1. VOC	15.0 tpy	12-month rolling time period as determined at the end of each calendar month	FG-Building2	0
2. Propylene glycol n-butyl ether (alpha isomer) (CAS No. 5131-66-8)	10.4 tpy	12-month rolling time period as determined at the end of each calendar month	EU-Spray Line portion of FG-Building2	0

PTI No. 38-17, FG-Building2, II. MATERIAL LIMITS

Material	Limit	Time Period / Operating Scenario	Equipment	Jan-Mar 2018 data
1. VOC content of coating materials	2.5 lb/gal (minus water) as applied	Instantaneous	EU-Spray Line portion of FG-Building2	2.08 (max)
2. VOC content of coating materials	6.9 lb/gal (minus water) as applied	Instantaneous	EU-Molding Line portion of FG-Building2	1.13 (max)

All exhaust filtersone Torit Downflow Dust Collector for both Spray Line and Molding Line and one local Donaldson Torit filter for occasional dust blow-off for Heesmann sander) are

operating properly and HVLP guns are used (PTI No. 38-17, FG-Building2, IV. 1-3). Formulation / SDS VOC content is used (PTI No. 38-17, FG-Building2, V. 1: US EPA RM24). The calculation and records spreadsheet has records for Jan-Mar 2018 (PTI No. 38-17, FG-Building2, VI, 1-3: Records and calculations).

PTI No. 38-17, FG-DGME

Dipropylene glycol monobutyl ether (CAS No. 29911-28-2) emissions from the roll coat line and the two (2) spray coating lines.

0 tpy emissions for CY 2018 Jan-March 2018 (PTI No. 38-17, FG-DGME, I limit: 5.2 tons per year).

PTI No. 38-17, FGFACILITY

All process equipment source-wide including equipment covered by other permits, grandfathered equipment and exempt equipment.

0.02 tons per year Aggregate HAPs emissions per 3-month period Jan-Mar 2018 (PTI No. 38-17, FGFACILITY, I, 1-2 limits: 1. 8.9 single HAP and 2. 22.4 Aggregate HAPs, tons per year)

Calculations and records

Calculations and records are available only for three months of CY 2018. AQD is requesting improvements to the spreadsheet.

US EPA RM24

In response to the request via e-mail from Mala Hettiarachchi (mala.hettiarachchi@ergrp.net, Mon 3/12/2018 4:12 PM), on March 27, 2018. AQD approved use of Environmental Data Sheets (EDS) or coating formulation data in lieu of United States Environmental Protection Agency (US EPA) Reference Method 24 (US EPA RM 24) to determine VOC content of coatings or materials

Clean-up solvent - acetone

Acetone is used for cleaning brushes and machines.

Acetone (CAS # 67-64-1, C₃H₆O = CH₃-CO-CH₃) is not VOC pursuant to 336.1122 (V-definitions) (f)(xiii). However, acetone has high potential for fire and explosion due to low boiling point (BP = 133 °F), low flash point (FP = - 4 (negative) °F) and wide flammability range (flammability range = 2.5 %v (LEL) – 12.8%v (UEL)). Per Rule 336.1122 Definitions (V). (f) (xiii), Acetone is NOT "Volatile Organic Compound (VOC)"

Conclusion

Non-compliance: AQD issued Violation Notice (VN), dated September 12, 2017 for failure to comply with Rules 336.1201 (Permit-to-Install) & 336.1210 (ROP) and NESHAP / MACT 4Q (Wood Building Products Surface Coating). Under negotiations for Consent Order settlement. MS Excel calculations worksheet is still being developed.

NAME J. S. Kananahall

DATE 04/23/2018

SUPERVISOR Joyce E.