



## Environmental Resources Group

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September 29, 2017

Mr. Iranna Konanahalli, MDEQ – AQD  
Lansing District Office  
525 West Allegan Street  
4<sup>th</sup> Floor North  
Lansing, MI 48933

**RE: Response to the Violation Notice Letter  
Rosati Specialties, LLC.  
24200 Capital Boulevard, Clinton Township, MI**

Dear Mr. Konanahalli:

On behalf of our client, Rosati Specialties, LLC (RS), Environmental Resources Group (ERG), is pleased to respond to the September 12, 2017 Violations Notice (VN) letter from the Michigan Department of Environmental Quality (MDEQ). Your letter was sent following the site inspection meeting with Mr. Donald Rosati on August 10, 2017.

### **Background Information**

RS submitted a Permit to Install Opt-Out application per the requirements of Part 5501(1) of Article II, Chapter I, Part 55 (Air Pollution Control) of P.A. 451 of 1994, as amended to the MDEQ on February 22, 2017. The Permit to Install (PTI) number 38-17 was issued by the MDEQ to RS on May 19, 2017. Submission of the application was precipitated based on an initial meeting with MDEQ where it was brought to Mr. Rosati's attention that he might be operating the business in violation of state regulations. RS hired ERG shortly thereafter, initially to determine if they met any of the exclusions and exemptions permitted by law, but after the initial study, it was determined RS needed to apply for a PTI to limit the source's Potential to Emit (PTE) to below applicable major source thresholds to minimize potential air pollution.

Prior to completing the PTI application, RS had minimal to no records so it was necessary to based much of the permit limits on purchased product, not actual used products. However, since the permit was issued three months ago, RS began training its employees to perform record keeping of the products that are used at the five emission units (EU). In addition, RS has been working with their subcontractors to develop a system to automatically record/calculate the daily use of coatings/pigments at the stain laboratory where some of the custom coatings are made. Recently, ERG developed a spreadsheet system to record and calculate volatile organic compound (VOC) emissions and hazardous air pollutant (HAP) emissions at each EU per permit conditions stated in PTI 38-17. RS will use these spreadsheets to record monthly/daily product use and calculate VOC/HAP emissions.

RS is a small business with a philosophy to conduct business while protecting the environmental and doing the right thing. Even while completing the permit application itself RS was been cognitive of VOC content in the coating materials and always in the lookout for economical yet sustainable alternative green products to replace the coatings with higher VOC contents. For example, RS replaced a few coatings that are used in EU UV Roll Coat and EU Stain Roll Coat lines with products with minimal to no VOCs.

The MDEQ's two-page September 12, 2017 letter identifies four violations, based on the site inspection on August 10, 2017. In addition, several other concerns were noted in the Violation Notice. The MDEQ requested a response by October 3, 2017 which is detailed enough to address these items:

- i. The dates the violations occurred,
- ii. An explanation of the causes and duration of the violations,
- iii. Whether the violations are ongoing,
- iv. Actions taken to correct the violations, and
- v. Steps implemented to prevent reoccurrence.

#### **Response Letter Organization**

This response letter has been prepared to follow the same list and numbered sequence used in MDEQ's Violation Notice letter to help convey our information. In summary MDEQ's first four listed rule/permit condition violations are not applicable. ERG provides details in the following sections.

#### **Response to Specific Violation Concerns**

- *Rule 336.1201 – MDEQ Comment: RS installed, in two adjacent buildings (24200 Capital Boulevard [Building 1, installed process equipment in 2006] and 24300 Capital Boulevard [Building 2, installed process equipment in 2011]) wood finishing process equipment prior to obtaining a permit.*

Response: This information is partially inaccurate. RS installed "EU – Spray Booth" which utilize hand-held spray guns (operated one at a time) in 2006 in Building 1. EU – Stain Roll Coat Line and EU – UV Roll Coat Line were installed in Building 1 in 2008 and 2000, respectively. EU – Molding Line in Building 2 was installed in 2001. EU – Spray Line was installed in Building 2 in 2011. All five EUs were installed prior to obtaining PTI 38-17.

The MDEQ AQD was aware of the installation and operation of these five EUs prior to receiving the PTI application. Please refer to Table 1 – Process Information included in the permit application for the date installed, manufacturer, process description, etc. ERG and RS believe this violation is not appropriate because our understanding is that the AQD issued the PTI 38-17 after careful review of the permit application, which included all relevant information and analysis, and knowing the equipment were previously installed.

- *Rule 336.1210 – MDEQ Comment: Rosati failed to obtain Renewable Operating Permit (ROP)*

Response: ERG believes RS does not need a ROP. ERG calculated the PTE (uncontrolled) for HAP using the highest percentage of HAP containing material for spray operations for 2014 and 2015 for the permit application. The results of the analysis indicated that the PTE value for HAPs was below major source thresholds (i.e., 10 tons of single HAP per year or 25 tons of aggregate HAP per year). Please see Attachment E – PTE Calculations included in the permit application dated February 22, 2017. In addition, ERG calculated PTE for all individual HAPs and aggregate HAPs. The results of the analysis also indicated that the PTE values (individual and aggregate) for HAPs were below major source thresholds. In fact, facility-wide actual annual aggregate HAP emission based on the product use in 2014 and 2015 was less than 1.5 tons (please see Table 2 and Table 3 included in the permit application dated February 22, 2017). Therefore, RS does not need a ROP. Furthermore, the PTI dated May 19, 2017 limits single HAP to 8.9 tons per year and aggregate HAPs to 22.4 tons per year and these values are below ROP thresholds.

RS PTI limits PTE to 50 tons of VOC per year well below ROP threshold VOC emission of 100 TPY. Please note, the actual annual VOC emission of all five (5) EUs were approximately 20 TPY in 2014 and 2015 (see Table 2 and 3 of the permit application dated February 22, 2017).

- *Rule 336.1210 – MDEQ Comment: RS failed to comply with NESHAP / MACT 4Q 40 CRR Part 63, National Emission Standards for Hazardous Air Pollutants: Surface Coating of Wood Building Products.*

Response: The Violation Notice letter indicates RS was a major source for HAP. This is inaccurate. ERG calculated the PTE (uncontrolled) for HAP using the highest percentage of HAP containing material for spray operations. The results of the analysis indicated that the PTE value for HAPs was below major source thresholds. Please see Attachment E – PTE Calculations included in the permit application dated February 22, 2017. In addition, ERG calculated PTE for individual HAPs and aggregate HAPs. The results of the analysis also indicated that the PTE values for HAPs (individual and aggregate) were below major source thresholds. Based on the historical data, RS did not exceed major source thresholds for HAPs and therefore did not fail to comply with NESHAP/MACT. The facility-wide actual annual aggregate HAP emission based on the product use in 2014 and 2015 was less than 1.5 tons (please see Table 2 and Table 3 included in the permit application dated February 22, 2017). The PTI 38-17 enforces 8.9 TPY for each individual HAP and 22.4 TPY for aggregate HAPs. ERG believes that with the current operation schedule, capacity and product use, RS will never violate or even reach the permit limits for HAPs.

- *PTI No. 38-17 – MDEQ Comment: Rosati failed to comply with the entire permit; e.g., record keeping, calculations, coating VOC and HAP analysis, etc.*

Response: Since the permit was issued last May, RS has been developing policies and procedures to allow them to operate in compliance with their new permit, including training employees to maintain records of the products used at the five emission units. In addition, RS has been working with their subcontractors to develop a system to automatically

record/calculate the daily use of coatings/pigments at the stain laboratory where custom coatings are made.

At the request of RS, ERG developed a spreadsheet system to record and calculate VOC emissions and HAP emissions at each EU per limits/requirements stated in PTI 38-17. Beginning this month, RS will use these spreadsheets to record monthly/daily product use and calculate VOC and HAP emissions.

ERG calculated the VOC and HAP emission for EU Spray Line using daily data from the months of May through August since RS had already established an excellent record keeping system for the equipment in Building #2. Due to a lack of daily records for the other three EUs in Building #1 for the months of May, June, July and August, ERG calculated the VOC and HAP emissions at those three EUs based on the purchased product volumes. Therefore, the VOC/HAP emissions might be more than the actual from the EUs except from the Spray Line.

ERG and RS expect to determine VOC and HAP emissions from each EU using daily/monthly actual usage data for September 2017 and onward.

Attachment A and B present a compliance assessment per permit limits and an emission summary for May through August 2017 using the best available data provided to ERG.

The specific answers to the questions regarding this violation are summarized below.

- (i)     The dates the violations occurred: May 19 – August 31, 2017. RS has developed a record keeping mechanism and conducted employee training since the receipt of the PTI 38-17. An appropriate record keeping system and emission calculations based on actual daily/monthly product use for September 2017 will be available at the facility for MDEQ's review by October 15, 2017.
- (ii)     An explanation of the causes and duration of the violations: May 19 – August 31, 2017. RS has developed a record keeping mechanism and conducted employee training since the receipt of the PTI 38-17. Although the permit conditions were not evaluated on monthly basis for June, July and August, the attachments referenced above conclude no violations have occurred during these months.
- (iii)    Whether the violations are ongoing: No violations are ongoing.
- (iv)     Actions taken to correct the violations: RS has developed a record keeping mechanism and conducted employee training since the receipt of the PTI 38-17. An appropriate record keeping system and emission calculations based on actual daily/monthly product use for September 2017 will be available at the facility for MDEQ's review by October 15, 2017.
- (v)     Steps implemented to prevent reoccurrence: RS believes their record keeping and employee training will prevent recurrence.

**Response to Other Concerns Identified in the Violation Notice**

- MDEQ Concern/Request: Facility-wide PTE for all pollutants at the source (at this time only VOC, each single HAP and aggregate HAP).

Response: This information was previously provided to MDEQ with the permit application dated February 22, 2017.

- *Facility-wide actual emissions of VOC, each single HAP and aggregate HAPs for Calendar Year (CY) 2016, CY2015, CY2014, CY2013, and CY2012.*

Response: The requested information for CY2014 and CY2015 was previously provided to MDEQ with the permit application dated February 22, 2017. There are not sufficient business records to accurately generate the requested facility-wide actual emissions of VOCs for prior years. The historical trends from CY2014 and CY2015 were essentially unchanged in CY2016 (based on facility sales, square feet of product coated, etc.) so ERG and RS do not believe there is any benefit to provide values for CY2016. However, RS is committed to keep records of actual product use and calculate VOC and HAP emissions from the effective date of the PTI permit.

Please see Attachment A and B for a compliance assessment per permit limits and an emission summary for May through August 2017.

**Conclusion**

ERG is currently serving as the environmental consultant for RS and has been authorized to speak to these VN issues on behalf of our client. Should the MDEQ have any questions regarding this letter, please contact one of the following individuals:

- Mala C. Hettiarachchi, PhD, PE, Project Engineer at (248) 773-7986 (office number), or
- Matthew J. Germane, PE, Senior Environmental Engineer at (248) 773-7986 (office number).

ERG believes RS is making a good progress with adjusting and familiarizing themselves with their new air permit. Certainly, RS would have appreciated MDEQ's cooperation, advice, and guidance during the initial stage of implementing the permit conditions rather than receiving a Violation Notice within days of MDEQ's first inspection less than 3 months of issuing the PTI permit. Upon receipt of this letter, we request that a meeting be arranged with RS, ERG, and MDEQ's field inspector to clarify RS's responsibilities under the permit and to confirm compliance procedures are in place that meet their obligations.

RS appreciates the opportunity to respond to MDEQ's VN dated September 12, 2017. ERG is authorized to assist RS to develop procedures and processes to permit adequate record keeping of the products and VOC/HAP emission calculations per PTI 38-17.

If you have questions about this response letter or any of the attachments, please contact the undersigned at (248) 773-7986 or email at [matt.germane@ERGrp.net](mailto:matt.germane@ERGrp.net).

Mr. Iranna Konanahalli, MDEQ – AQD  
Response Letter to RS's Violation Letter  
September 29, 2017  
Page 6

Sincerely,  
**ENVIRONMENTAL RESOURCES GROUP, LLC**



Matthew J. Germane, PE  
Senior Environmental Engineer



Mala C. Hettiarachchi, PhD, PE  
Project Engineer

MG/MCH/DS



Enclosures: Attachment A – Air Permit Compliance Assessment  
Attachment B – Emission Summary

Cc/via email: Lynn Fielder, MDEQ  
Mary Ann Dolehanty, MDEQ  
Chris Ethridge, MDEQ  
Thomas Hess, MDEQ  
Joyce Zhu, MDEQ

**Attachment A**  
**Air Permit Compliance Assessment - 2017 (Starting May 2017)**  
**Rosati Specialties, Inc.**  
**PTI 38-17**  
**1 of 1**

	Permit Limit	Actual (From May 2017)	Compliance	Notes
<b>EU Spray Booth</b>				
VOC emissions (TPY)	10	0.79	YES	
VOC content of coating material (lb./gal)	7	5.86	YES	The coating with maximum VOC content (minus water)
<b>FG - EU Roll Coat Lines</b>				
VOC emissions (TPY)	25	4.24	YES	From EU Stain Roll Coat Line and EU UV Roll Coat Line
Acetone (TPY)	14	0.18	YES	Assume: all acetone is used at roll lines
Maximum daily VOC emission per 1,000 square feet of finished product (lb./1,000 sq.ft.)	8	1.68	YES	
<b>FG - EU Spray Line and EU Molding Line</b>				
VOC emissions (TPY)	15	1.06	YES	
Propylene glycol n-butyl ether (TPY)	10.4	0.00	YES	
Spray Line - VOC content of coating material (lb./gal)	2.5	1.13	YES	The coating with maximum VOC content (minus water)
Molding Line - VOC content of coating material (lb./gal)	6.9	0.00	YES	This EU has not been used since the issuance of the permit
<b>FG-DGME (EU Roll Coat; EU Spray Booth; EU Molding Line)</b>				
Dipropylene glycol monobutyl ether (TPY)	5.2	0.22	YES	
<b>HAPs - Facility wide</b>				
Individual HAPs (TPY) - EU Spray Line	8.9	0.03	YES	Maximum of individual HAP emissions (from May 2017)
Individual HAPs (TPY) - EU Molding Line	8.9	0.00	YES	
Individual HAPs (TPY) - EU UV Roll Coat Line	8.9	0.00	YES	
Individual HAPs (TPY) - EU Stain Roll Coat Line	8.9	0.01	YES	
Individual HAPs (TPY) - EU Spray Booth	8.9	0.01	YES	
Aggregate HAPs (TPY)	22.4	0.05	YES	

Notes:

 In compliance with permit limits  
 Not in compliance with permit limits

Attachment B  
Emission Summary - 2017 (Starting May 2017)  
Rosati Specialties, Inc.  
PTI 38-17  
1 of 2

Emission Unit	VOC emissions (at the end of each calendar month), tons												Total (starting May 2017) (tons)
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
<b>Building 1</b>													
EU Spray Booth					0.198	0.198	0.198	0.198					0.791
EU Stain Roll Coat Line					0.142	0.142	0.103	0.137					0.524
EU UV Roll Coat Line					1.009	1.009	0.726	0.969					3.713
												<i>Sub Total</i>	<b>5.028</b>
<b>Building 2</b>													
EU Molding Line					0.000	0.000	0.000	0.000					0.000
EU Spray Line					0.323	0.304	0.268	0.165					1.061
												<i>Sub Total</i>	<b>1.061</b>
<b>Total VOC Emissions (tons)</b>												<b>6.089</b>	

Emission Unit	Propylene glycol n-butyl ether emissions (at the end of each calendar month), tons												Total (starting May 2017) (tons)
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
<b>Building 2</b>													
EU Molding Line					0.000	0.000	0.000	0.000					0.000
EU Spray Line					0.000	0.000	0.000	0.000					0.000
												<i>Sub Total</i>	<b>0.000</b>

Emission Unit	Dipropylene glycol monobutyl ether (at the end of each calendar month), tons												Total (tons)
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
<b>Building 1 / Building 2</b>													
EU Spray Booth					0.000	0.000	0.000	0.000					0.000
EU Stain Roll Coat Line					0.000	0.000	0.000	0.000					0.000
EU UV Roll Coat Line					0.061	0.061	0.044	0.058					0.224
EU Molding Line					0.000	0.000	0.000	0.000					0.000
												<i>Sub Total</i>	<b>0.224</b>

Emission Unit	HAP emissions (at the end of each calendar month), tons												Total (tons)
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
<b>Building 1</b>													
EU Spray Booth					0.003	0.003	0.003	0.003					0.013
EU Stain Roll Coat Line					0.004	0.004	0.003	0.004					0.013
EU UV Roll Coat Line					0.000	0.000	0.000	0.000					0.000
												<i>Sub Total</i>	<b>0.026</b>



Attachment B  
Emission Summary - 2017 (Starting May 2017)  
Rosati Specialties, Inc.  
PTI 38-17  
2 of 2

Building 2												
EU Molding Line					0.000	0.000	0.000	0.000				0.000
EU Spray Line					0.006	0.009	0.009	0.005				0.028
											<i>Sub Total</i>	<i>0.054</i>
<b>Total HAP Emissions (tons)</b>												<b>0.080</b>

Emission Unit	VOC emissions - Flatwood, lb./1000 sq.ft											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>Building 1</b>												
<b>EU Stain Roll Coat Line and UV Roll Coat Line</b>												
Maximum VOC (lb./1000 sq.ft)					1.162	1.211	1.680	1.605				
Total Flatwood Area (sq. ft.)					703,594	828,620	405,014	572,195				

Emission Unit	ACETONE - VOC emissions (tons)												Total (tons)	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
VOC (tons)					0.045	0.045	0.045	0.045						<b>0.181</b>