

# STATE OF TENNESSEE AIR POLLUTION CONTROL BOARD DEPARTMENT OF ENVIRONMENT AND CONSERVATION NASHVILLE, TENNESSEE

#### PERMIT TO OPERATE AIR CONTAMINANT SOURCE(S)

**Permit Number:** 081315

**Facility (Permittee):** Eurotranciatura U.S.A., LLC

**Facility ID:** 40-0177

**Facility Address:** 200 Highway 69 North, Paris

Henry County

**Facility Classification:** True Minor

Federal Requirements: None

**Facility Description:** Electric Motor Rotor Manufacturing

Operating Permit 081315, consisting of 17 pages is hereby issued March 26, 2024, pursuant to the Tennessee Air Quality Act and by the Technical Secretary, Tennessee Air Pollution Control Board, Department of Environment and Conservation. This permit expires on June 1, 2033. The holder of this permit shall comply with the conditions contained in this permit as well as all applicable provisions of the Tennessee Air Pollution Control Regulations (TAPCR).

Michelle W. Owenby Technical Secretary

Tennessee Air Pollution Control Board

No Authority is Granted by this Permit to Operate, Construct, or Maintain any Installation in Violation of any Law, Statute, Code, Ordinance, Rule, or Regulation of the State of Tennessee or any of its Political Subdivisions.

Rev. 02/10/2023 RDA-1298

#### <u>Section I – Sources Included in this Operating Permit</u>

FACILITY DESCRIPTION			
Source Number	Source Description	Status	Control Device/Equipment
01	ABB Rotor Production Equipment	Existing	None
02	Trane Rotor Production Equipment	Existing	None

#### **Section II – Permit Record**

Permit Type	Description of Permit Action	Issue Date
Initial	Initial Operating Permit	March 26, 2024

#### **Section III - General Permit Conditions**

#### **G1.** Responsible Person

The application that was utilized in the preparation of this operating permit is dated April 13, 2023, and is signed by Matteo Fassio, Chief Operations Officer, the Responsible Person for the permittee. The Responsible Person may be the owner, president, vice-president, general partner, plant manager, environmental/health/safety coordinator, or other person that is able to represent and bind the facility in environmental permitting affairs. If this Responsible Person terminates their employment or is assigned different duties and is no longer the person to represent and bind the permittee in environmental permitting affairs, the new Responsible Person for the permittee shall notify the Technical Secretary of the change in writing. The Notification shall include the name and title of the new Responsible Person assigned by the permittee to represent and bind the permittee in environmental permitting affairs, and the date the new Responsible Person was assigned these duties.

Should a change in the Responsible Person occur, the new Responsible Person must submit the Notification provided in Appendix 1 of this permit no later than 30 days after being assigned as the Responsible Person. A separate notification shall be submitted for each subsequent change in Responsible Person.

TAPCR 1200-03-09-.03(8)

#### **G2.** Application and Agreement Letters

This source shall operate in accordance with the terms of this permit, the information submitted in the approved permit application(s) referenced in **Condition G1**, and any documented agreements made with the Technical Secretary.

TAPCR 1200-03-09-.01(1)(d)

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#### **G3.** Submittals

Unless otherwise specified within this permit, the permittee shall submit, preferably via email and in Adobe Portable Document format (PDF), all applicable plans, checklists, certifications, notifications, test protocols, reports, and applications to the attention of the following Division Programs at the email addresses indicated in the table below:

Permitting Program	Compliance Validation Program	Field Services Program
<ul> <li>Notifications</li> <li>Startup certifications</li> <li>Applications</li> <li>NSPS reports</li> <li>MACT/GACT/NESHAP reports</li> <li>Emission Statements</li> </ul>	<ul> <li>Test protocols</li> <li>Emission test reports</li> <li>Visible emission evaluation reports</li> </ul>	Semiannual reports     Annual compliance     certifications/status reports
Division of Air Pollution Cont William R. Snodgrass TN Tow 312 Rosa L. Parks Avenue Nashville, TN 37243 Air.Pollution.Control@tn.gov		Jackson Environmental Field Office Division of Air Pollution Control 1625 Hollywood Drive Jackson, TN 38305 APC.JackEFO@tn.gov

The permittee shall submit the information identified above as requested in this permit. In lieu of submitting this information to the email addresses above, the permittee may submit the information to the attention of the respective Division Programs at the mailing addresses listed above.

TAPCR 1200-03-09-.03(8)

#### **G4.** Notification of Changes

The permittee shall notify the Technical Secretary for any of the following changes to a permitted air contaminant source which would not be a modification requiring a new construction permit:

- change in air pollution control equipment that does not result in an increase or otherwise meet the definition of a modification
- change in stack height or diameter
- change in exit velocity of more than 25 percent or exit temperature of more than 15 percent based on absolute temperature.

The permittee must submit the Notification provided in Appendix 2 of this permit 30 days before the change is commenced.

TAPCR 1200-03-09-.02(7)

#### **G5.** Permit Transference

A. This permit is not transferable from one air contaminant source to another air contaminant source or from one location to another location. The permittee must submit a construction permit application for a new source to the Permitting Program not less than 90 days prior to the estimated starting date of these events. If the new source will be subject to major New Source Review, the application must be submitted not less than 120 days in advance of the estimated starting date of these events.

TAPCR 1200-03-09-.03(6)(b) and 1200-03-09-.01(1)(b)

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B. In the event an ownership change occurs at this facility, the new owner must submit the notification provided in Appendix 3 of this permit. The written notification must be submitted by the new owner to the Permitting Program no later than 30 days after the ownership change occurs. If the change in ownership results in a change in Responsible Person for the facility, notification of the change in Responsible Person must also be submitted, as specified in **Condition G1**.

TAPCR 1200-03-09-.03(6)(a) and (b)

#### **G6.** Operating Permit Renewal Application Submittal

A. The permittee shall apply for an operating permit renewal not less than 60 days prior to the permit's expiration date.

TAPCR 1200-03-09-.02(3)(a)

B. Operation of each air contaminant source shall be in accordance with the provisions and stipulations set forth in this permit, all provisions of the Tennessee Division of Air Pollution Control Regulations, and all provisions of the Tennessee Air Quality Act.

TAPCR 1200-03-09-.02(6)

#### G7. Fees

The air contaminant source(s) identified in this permit shall comply with the requirements for payment of applicable annual emission fees to the Tennessee Division of Air Pollution Control based on the Administrative Fees Schedule I provided in Appendix 4 of this permit. The fee must be paid to the Division in full by the first day of the month that the fee is due (determined from Appendix 4). (Note: not all facilities are required to pay annual emission fees)

TAPCR 1200-03-26-.02

#### **G8.** General Recordkeeping Requirements

A. All recordkeeping requirements for all data required to be recorded shall follow the following schedules:

For Daily Recordkeeping	For Weekly Recordkeeping	For Monthly Recordkeeping	
No later than seven days from the end of the day for which the data is required.	No later than seven days from the end of the week for which the data is required.	No later than 30 days from the end of the month for which the data is required.	

B. The information contained in logs, records, and submittals required by this permit shall be kept at the facility's address, unless otherwise noted, and provided to the Technical Secretary or a Division representative upon request. Computer-generated logs are acceptable. Compliance is assured by retaining the logs, records, and submittals specified in this permit for a period of not less than five years at the facility's address.

TAPCR 1200-03-10-.02(2)(a)

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#### **G9.** Routine Maintenance Requirements

The permittee shall maintain and repair the emission source, associated air pollution control device(s), and compliance assurance monitoring equipment as required to maintain and assure compliance with the specified emission limits.

TAPCR 1200-03-09-.03(8)

**Compliance Method:** Records of all repair and maintenance activities required above shall be recorded in a suitable permanent form and kept available for inspection by the Division. These records must be retained for a period of not less than five years. The date each maintenance and repair activity began shall be entered in the log no later than seven days following the start of the repair or maintenance activity, and the completion date shall be entered in the log no later than seven days after activity completion.

#### **G10.** Visible and Fugitive Emissions

A. Unless otherwise specified, visible emissions from this facility shall not exhibit greater than 20% opacity, except for one six-minute period in any one-hour period, and for no more than four six-minute periods in any 24-hour period. A stack is defined as any chimney, flue, conduit, exhaust, vent, or opening of any kind whatsoever, capable of, or used for, the emission of air contaminants.

TAPCR 1200-03-05-.01(1) and 1200-03-05-.03(6)

**Compliance Method:** When required to demonstrate compliance, visible emissions shall be determined by EPA Method 9, as published in the current 40 CFR 60, Appendix A (six-minute average).

- B. The permittee shall not cause, suffer, allow, or permit any materials to be handled, transported, or stored; or a building, its appurtenances, or a road to be used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Reasonable precautions shall include, but are not limited to, the following:
  - (a) Use, where possible, of water or chemicals for control of dust in demolition of existing buildings or structures, construction operations, grading of roads, or the clearing of land;
  - (b) Application of asphalt, water, or suitable chemicals on dirt roads, material stock piles, and other surfaces which can create airborne dusts;
  - (c) Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials. Adequate containment methods shall be employed during sandblasting or other similar operations.

The permittee shall not cause, suffer, allow, or permit fugitive dust to be emitted in such manner to exceed five minutes per hour or 20 minutes per day as to produce a visible emission beyond the property line of the property on which the emission originates, excluding malfunction of equipment as provided in TAPCR 1200-03-20. A malfunction is defined as, any sudden and unavoidable failure of process equipment or for a process to operate in an abnormal and unusual manner. Failures that are caused by poor maintenance, careless operation, or any other preventable upset condition or preventable equipment breakdown shall not be considered malfunctions.

TAPCR 1200-03-08-.01(1) and 1200-03-08-.01(2)

**Compliance Method:** When required to demonstrate compliance, fugitive emissions shall be determined by Tennessee Visible Emissions Evaluation Method 4 as adopted by the Tennessee Air Pollution Control Board on April 16, 1986.

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C. Fugitive emissions from roads and parking areas shall not exhibit greater than 10% opacity.

TAPCR 1200-03-08-.03

**Compliance Method:** When required to demonstrate compliance, fugitive emissions from roads and parking areas shall be determined by utilizing Tennessee Visible Emissions Evaluation (TVEE) Method 1, as adopted by the Tennessee Air Pollution Control Board on April 29, 1982, as amended on September 15, 1982, and August 24, 1984.

#### **G11.** Facility-wide Limitations

Not Applicable

#### G12. NSPS/NESHAP/MACT/GACT Standards

Not Applicable

#### G13. VOC and NO<sub>X</sub> Emission Statement

Not Applicable

#### **G14.** Permit Supersedes Statement

This permit supersedes all previously issued permits for this/these source(s).

TAPCR 1200-03-09-.03(8)

#### **G15.** Source Testing Requirements

Not Applicable

#### G16. VOC and HAP Content, Surface Coating

The as-supplied volatile organic compound (VOC) and hazardous air pollutant (HAP) content of all VOC- and HAP-containing materials (all coatings, inks, adhesives, thinners, and solvents) to be used by this facility shall be determined from Safety Data Sheets (SDS) or manufacturer or vendor formulation data which explicitly list the VOC and HAP content by weight. If new materials are used, or if material formulation is changed, logs used to calculate emissions of VOC and HAP shall be updated within 30 days from the initial date of usage of the new or altered material.

TAPCR 1200-03-09-.03(8) and 1200-03-10-.02(2)(a)

Compliance Method: Purchase orders and/or invoices for all VOC- and HAP-containing materials, along with current SDS, must be maintained and kept available for inspection by the Technical Secretary or a Division representative. The SDS must explicitly list the VOC and HAP content by weight for all VOC- and HAP-containing materials. If SDS are not available with this information, vendor formulation data containing the required information for those materials must also be maintained. Scanned documents (maintained electronically) may be used to fulfill this requirement. These records must be retained in accordance with Condition G8.

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#### **G17.** Informational HAP Condition

At the time of initial permit issuance, the potential to emit hazardous air pollutants (HAP) from this facility was less than the major source applicability thresholds of 10 tons per year of a single HAP and less than 25 tons per year of a combination of HAP. The permittee must apply for and receive a construction permit in accordance with the procedures in Chapter 1200-03-09 of the TAPCR prior to making any changes such that the potential to emit hazardous air pollutants from the facility will exceed these thresholds.

TAPCR 1200-03-09-.03(8)

Source Number	Source Description
01, 02	<b>01: ABB Rotor Production Equipment</b> – This source is a production line for electric motor rotors. Rotor stacks are assembled by stacking steel laminations on an arbor to a specified stack length. A 1.25 MMBtu gasfired oven is used to preheat the rotor stacks. Aluminum is heated in an induction furnace. Flux is added to the molten aluminum. The rotor stacks and molten aluminum are then directed to a die cast process. Release agents and lubricating oil are used in the die cast process. After casting, the rotor assembly is cooled. Rotor fan blades are cut to a specified length by an auto band saw utilizing cutting fluid and further machining is performed utilizing honing fluid. The finished rotor is washed in a degrease operation.
01, 02	<b>02: Trane Rotor Production Equipment</b> – This source is a production line for electric motor rotors. Rotor stacks are assembled by stacking steel laminations on an arbor to a specified stack length. Aluminum is heated in a 3.0 MMBtu/hr natural gas-fired furnace. Flux is added to the molten aluminum. The rotor stacks and molten aluminum are then directed to a die cast process. Release agents and lubricating oil are used in the die cast process. After casting, the rotor assembly is cooled. Rotor fan blades are cut to a specified length by an auto band saw utilizing cutting fluid and further machining is performed utilizing honing fluid. The finished rotor is washed in a degrease operation.

#### S1-1. Input Limitation(s) or Statement(s) of Design

A. The stated design process input rate for the aluminum melting furnaces at these sources are listed below.

Source Number	Process Input Material	Process Input Rate (lbs/hr) (Daily Average Basis)
01	Aluminum Ingot	87.5
02	Aluminum Ingot	800

TAPCR 1200-03-09-.01(1)(d) and the application dated August 17, 2022

**Compliance Method:** The permittee shall maintain documentation to demonstrate the stated process input rate for these furnaces. Documentation shall include, but is not limited to, manufacturer's specifications, purchase records, operating manuals, or a tag affixed to the unit by the manufacturer. If such documentation which readily shows the stated process input rate for these furnaces is not available, the permittee shall maintain aluminum input records in the log in Appendix 7, or an alternative format which readily provides the same information. These documents shall be kept readily available/accessible and made available upon request by the Technical Secretary or a Division representative.

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B. The stated design heat input capacity for these sources is listed below.

Source Number	Description	Heat Input (lb/MMBtu)	
01	Preheat Oven	1.25	
02	Aluminum Melt Furnace	3.0	

TAPCR 1200-03-09-.01(1)(d) and the application dated August 17, 2022

**Compliance Method:** The permittee shall maintain documentation to demonstrate the heat input rate for each emission unit. Documentation shall include, but is not limited to, manufacturer's specifications, purchase records, operating manuals, or a tag affixed to the unit by the manufacturer. These documents shall be kept readily available/accessible and made available upon request by the Technical Secretary or a Division representative.

C. Only natural gas shall be used as fuel for these sources.

TAPCR 1200-03-09-.01(1)(d) and the application dated August 17, 2022

**Compliance Method:** The permittee shall maintain documentation to demonstrate the type(s) of fuel used by each fuel burning unit. Documentation shall include, but is not limited to, manufacturer's specifications, purchase records, operating manuals, or a tag affixed to the unit by the manufacturer. These documents shall be kept readily available/accessible and made available upon request by the Technical Secretary or a Division representative.

#### **S1-2.** Production Limitation(s)

Not Applicable

#### S1-3. Operating Hour Limitation(s)

Not Applicable

#### S1-4. Emission Limitation(s)

A. Particulate matter (PM) emitted from these sources, including PM emissions from fuel combustion, shall not exceed 2.17 pounds per hour (lbs/hr) combined, on a daily average basis.

TAPCR 1200-03-07-.03(1)

Compliance Method: Compliance with this condition is assured by compliance with Conditions S1-1A, S1-1B, S1-1C, and using the AP-42 emission factors for natural gas combustion (Table 1.4-2) and secondary aluminum operations (Table 12.8-2).

B. Volatile organic compounds (VOC) emitted from these sources, not including VOC emissions from fuel combustion, shall not exceed 7.03 tons during any period of 12 consecutive months.

TAPCR 1200-03-07-.07(2)

**Compliance Method:** The permittee shall demonstrate compliance with this condition by calculating actual quantities of VOC emitted from these sources each month and during each period of 12 consecutive months and maintaining a log of this information in a format similar to that contained in the example logs in Appendix 7. All records and calculations required by this condition shall be retained as specified in **Condition G8**.

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C. Maximum emissions of VOC, SO<sub>2</sub>, NO<sub>X</sub>, and CO from combustion of natural gas at these sources were calculated using AP-42 Tables 1.4-1 and 1.4-2 for natural gas combustion, as follows.

Pollutant	Emission Rate (tons/yr)	TAPCR 1200-03-
VOC	0.10	0707(2)
$SO_2$	0.01	1403(5)
$NO_X$	1.83	0707(2)
CO	1.53	0707(2)

#### S1-5. Source-Specific Visible Emissions Limitation(s)

Not Applicable

#### (end of conditions)

The permit application gives the location of this source as 36°30'56" N Latitude and 88°34'17" W Longitude.

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# **Appendix 1: Notification of Change in Responsible Person**

Facility (Permittee):	Eurotranciatura U.S.A.,	LLC
Facility ID: 40-017	77	
Former Responsible Person:		
_	Name	Title
New Responsible Person:		
_	Name	Title
_	Email	
_	Ma	ailing Address
_	Phone (Office)	Phone (cell)
Date New Responsible Person was	s assigned this duty:	
	e to the best of my knowledge.	), I certify that the information contained in As specified in Tennessee Code Annotated ury.
Signature		Date
Signer's name (print)	Title	Phone (with area code)

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# **Appendix 2: Notification of Changes**

Facility (Permittee):		Eurotranciatu	ra U.S.A., LLC		
Facility ID: Source Number	er:	40-0177			
	Control Equipment	Stack Height (Feet)	Stack Diameter (Feet)	Exit Velocity (Feet/Second)	Exit Temperature (°F)
Current					
Proposed					
Current					
Proposed					
Current					
Proposed					
Notification is ac	ble Person of the abo ecurate and true to the s declaration is made	e best of my know	lity (permittee), I certilledge. As specified in perjury.	fy that the informat Tennessee Code A	ion contained in this nnotated Section 39-
Signature				Date	
Signer's name (	(print)	Title		Phone (with area	code)

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## **Appendix 3: Notification of Ownership Change**

Facility (Permittee): Eu	rotranciatura U.S.A., LLC	(	(Previous Owner)	
<b>Facility ID:</b> 40-017'	7			
Facility (Permittee):		(New Owner)	Date of Ownership Change	
Secretary of State Control Number:		[as registered with	th the TN Secretary of State (SOS)]	
Responsible Person/Authorized Contact		Email Address		
Mailing Address		Phone with area code		
Principal Technical Contact		Email Address		
Mailing Address		Phone with area of	code	
Billing Contact		Email Address		
Mailing Address		Phone with area of	none with area code	
As the responsible person for the new owner	or operator of the above men	tioned facility (p	ermittee):	
• I agree to not make any changes to Division 1200-03 or Division 0400-		meet the definition	on of modification as defined in	
<ul> <li>I agree to comply with the conditions 30 of the Tennessee Air Pollution agreements made by the previous ov</li> </ul>	Control Regulations, the Te	nnessee Air Qua		
List all active permits issued to the facility	for which the owner wishes	o assume owner	ship:	
The information contained in this Notification Code Annotated Section 39-16-702(a)(4), this		-	-	
Signature		Date		
Signer's name (print)  Title		Phone (with	area code)	

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<sup>&</sup>lt;sup>1</sup> Appropriate application forms must be submitted prior to modification of the stationary source(s).

### **Appendix 4: Fees**

All minor and conditional major source annual emission fees are due and payable to the Division in full according to SCHEDULE I below<sup>2</sup> unless otherwise specified in TAPCR 1200-03-26-.02(6)(c). The county that a source is located in determines when the minor source annual emission fee is due. Fees are due the first day of the month listed. If a source is located on contiguous property in more than one county, the county appearing earliest in the calendar year shall be used to determine the due date of the annual emission fee.

SCHEDULE I

Month the Annual Emissions Fee is Due (Accounting Period)

Counties in the Monthly Grouping

January	Anderson, Bedford, Benton, Bledsoe, Blount, Bradley and Campbell
February	Cannon, Carroll, Carter, Cheatham, Chester, Claiborne, Clay and Cocke
March	Coffee, Crockett, Cumberland, Davidson, Decatur, DeKalb, Dickson, Dyer and Fayette
April	Fentress, Franklin, Gibson, Giles, Grainger, Greene and Grundy
May	Hamblen, Hamilton, Hancock, Hardeman, Hardin, Hawkins, Haywood and Henderson
June	Henry, Hickman, Houston, Humphreys, Jackson, Jefferson, Johnson, Knox, Lake, Lauderdale, Lawrence and Lewis
July	Lincoln, Loudon, McMinn, McNairy, Macon and Madison
August	Marion, Marshall, Maury, Meigs, Monroe, Montgomery, Moore and Morgan
September	Obion, Overton, Perry, Pickett, Polk, Putnam and Rhea
October	Roane, Robertson, Rutherford, Scott, Sequatchie, Sevier, and Shelby
November	Smith, Stewart, Sullivan, Sumner, Tipton, Trousdale, Unicoi and Union
December	Van Buren, Warren, Washington, Wayne, Weakley, White, Williamson and Wilson

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<sup>&</sup>lt;sup>2</sup> Note that some sources with allowable emissions below specific thresholds are not subject to the requirement to pay annual emission fees. Contact the Emission Inventory Program at <a href="mailto:apc.inventory@tn.gov">apc.inventory@tn.gov</a> if you have any questions.

## **Appendix 5: Emission Statement for VOC and NO**<sub>X</sub>

Not Applicable

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## **Appendix 6: Agreement Letters**

Not Applicable

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## **Appendix 7: Example Logs**

#### **Example Log for Condition S1-1A**

	Aluminum Throughput Log							
Month/Year:				Source Number:				
Day	Aluminum Input (lbs.)	Hours of Operation	*Daily Average Aluminum Input (lbs./hr.)	Day	Aluminum Input (lbs.)	Hours of Operation	*Daily Average Aluminum Input (lbs./hr.)	
1				17				
2				18				
3				19				
4				20				
5				21				
6				22				
7				23				
8				24				
9				25				
10				26				
11				27				
12		·		28				
13				29				
14				30				
15				31				
16								

<sup>\*</sup>The daily average basis is to be calculated by dividing the mass value of a day's aluminum input (lbs.) by the hours of operation for that same day.

#### **Example Logs for Condition S1-4B**

Monthly VOC Calculation Table							
Month/Year:							
[1]	[2]	[3]	[4]	[5]	[6]	[7]	
Material ID	Material Name	Material Usage (gal/month or lb/mo)	Material Density (lb/gal)	VOC Content (wt% or lb VOC/gal)	VOC (lb/mo)	VOC (ton/mo)	
Total							

<sup>[6]</sup> VOC Emissions (lb/mo) = [3] Material Usage (gal/mo) \* [4] Material Density (lb/gal) \* [5] VOC Content (wt%), or

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<sup>[6]</sup> VOC Emissions (lb/mo) = [3] Material Usage (gal/mo) \* [5] VOC Content (lb/gal)

<sup>[7]</sup> VOC Emissions (ton/mo) = [6] VOC Emissions (lb/mo) / 2,000 lb/ton

12 Consecutive Month VOC Calculation Table							
	[7]	[8]					
Month/Year	VOC (ton/mo)	VOC (ton/12 consecutive months)					
_	_						

<sup>[8]</sup> The tons per 12-consecutive month values are the sum of the emissions in the 11 months preceding the month just completed + the emissions in the month just completed.