



STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR RESOURCES

EMISSIONS CAP PERMIT

AMTROL INC.

EMISSIONS CAP NO. XXX-2019

Pursuant to the provisions of “**Operating Permits**” 250-RICR-120-05-29, this emissions cap permit is issued to:

Amtrol Inc.
1400 Division Road
West Warwick, RI 02893

This emissions cap permit shall be effective from the date of its issuance and shall remain in effect until revoked by or surrendered to the Department.

This emissions cap permit does not relieve *Amtrol Inc.* from compliance with applicable state and federal air pollution control rules and regulations. The design, construction and operation of this facility shall be subject to the attached operating requirements and conditions.

This emission cap shall be considered an enforceable document as the term is used in “General Definitions Regulation” 250-RICR-120-0(A)(17).

Laurie Grandchamp, P.E., Chief
Office of Air Resources
Date of Issuance: XX/XX/2019

**STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
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Amtrol Inc.

DRAFT Emissions Cap No. XXX-2019

A. Emission Limitations

1. Volatile Organic Compounds (VOC)

- a. The total quantity of Volatile Organic Compounds (VOC) discharged to the atmosphere from the entire facility shall not exceed 8,167 pounds of VOC per calendar month based upon a 12-month rolling average.
- b. The permittee shall only use low-VOC coatings which have an as applied VOC content, minus water and exempt compounds that does not exceed the applicable VOC content limitations as specified in Conditions (1)(b)(1-2) in this subsection:
 - (1) The VOC content of each coating used at the facility, shall not exceed the following emission limitation specified in Table 1 of this permit, (effective **prior** to July 1, 2020).

Table 1

Coating Category	lbs. VOC/gallon of coating, minus water and exempt compounds, as applied
Clear Coating	4.3
Air Dried*	3.5
Extreme Performance Coatings	3.5
All Other Coatings on Misc. Metal Parts	3.0

* "Air-dried coating" means a coating that is dried by the use of air or forced warm air at temperatures up to ninety degrees Celsius (90°C) or one hundred and ninety-four, degrees Fahrenheit (194°F).

- (2) The VOC content of each coating used at the facility, shall not exceed the emission limitation specified in the Table 2 of this permit, (effective **after** July 1, 2020).

Table 2

Coating Category	Air Dried* lbs. VOC/gallon of coating, minus water and exempt compounds, as applied	Baked** lbs. VOC/gallon of coating, minus water and exempt compounds, as applied
General One Component	2.8	2.3
General Multi Component	2.8	2.3
Extreme Performance	3.5	3.0
Heat-Resistant	3.5	3.0
High Temperature	3.5	3.5
Metallic	3.5	3.5
Repair and Touch-Up	3.5	3.0
Camouflage	3.5	3.5
Electric-Insulating Varnish	3.5	3.5
Etching Filler	3.5	3.5
Extreme High-Gloss	3.5	3.0
High Performance Architectural	6.2	6.2
Military Specification	2.8	2.3
Mold-Seal	3.5	3.5
Pan Backing	3.5	3.5
Prefabricated Architectural Multi-Component	3.5	2.3
Prefabricated Architectural One-Component	3.5	2.3
Pretreatment Coatings	3.5	3.5
Silicone Release	3.5	3.5
Solar-Absorbent	3.5	3.0
Vacuum-Metalizing	3.5	3.5
Drum Coating, New Exterior	2.8	2.8
Drum Coating, New Interior	3.5	3.5
Drum Coating, Reconditioned, Exterior	3.5	3.5
Drum Coating, Reconditioned, Interior	4.2	4.2

* "Air-dried coating" means a coating that is dried by the use of air or forced warm air at temperatures up to ninety degrees Celsius (90°C) or one hundred and ninety-four, degrees Fahrenheit (194°F)

**"Baked" means cured at a temperature at or above ninety degrees Celsius (90°C) or one hundred ninety-four, degrees Fahrenheit (194°F).

2. Hazardous Air Pollutant (HAP)

- a. The total quantity of Hazardous Air Pollutant (HAP) emissions discharged to the atmosphere from the entire facility, shall not exceed 1,500 pounds of any one HAP or 4,000 pounds of any combination of HAPs per calendar month based upon a 12-month rolling average. HAP shall mean an air pollutant which has been listed pursuant to Section 112(b) of the Clean Air Act Amendments of 1990.

B. Operating Requirements

1. The permittee shall use one or more of the following application methods (Effective **after** July 1, 2020):
 - a. Electrostatic Spray Application;
 - b. HVLP Spray;
 - c. Flow Coat;
 - d. Roller Coat;
 - e. Dip Coat, including Electrodeposition;
 - f. Airless Spray;
 - g. Air-Assisted Airless Spray; or
 - h. A coating application method capable of achieving a transfer efficiency equivalent to the greater than that achieved by HVLP, as approved by the Office of Air Resources and USEPA.
2. The permittee shall implement the following work practices for coating related activities:
 - a. Store all new and used VOC-containing coatings, thinners or coating related waste in closed containers;
 - b. Ensure that mixing and storage containers used for VOC-containing coatings, thinners and coating-related waste materials are kept closed at all times except when depositing or removing these materials;
 - c. Minimize spills of VOC-containing coatings, thinners and coating-related waste materials; and
 - d. Convey VOC-containing coatings, thinners and coating related waste materials from one location to another in closed containers or pipes.
3. The permittee shall implement the following work practices for cleaning related activities:
 - a. Store all VOC-containing cleaning materials and used shop towels in closed containers;
 - b. Ensure that storage containers used for VOC-containing cleaning materials are kept closed at all times except when depositing or removing these materials;
 - c. Minimize spills of VOC- containing cleaning materials;
 - d. Convey VOC-containing cleaning materials from one location to another in closed containers or pipes.

- e. Minimize VOC emissions from cleaning of application, storage mixing and conveying equipment by ensuring that equipment cleaning is performed without atomizing the cleaning solvent and all spent solvent is captured in closed containers.

C. Testing Requirements

1. Compliance with emission limitations specified in Condition 1.a(1-2) of this permit shall be demonstrated in accordance with 40 CFR 60, Appendix A-7, Methods 24,24A, 25, 25A incorporated in “Control of Volatile Organic Compounds from Surface Coating Operations” 250-RICR-120-05-19.4 or any other USEPA approved method which has been accepted by the Office of Air Resources and USEPA. A one-hour bake time shall be used for 40 CFR 60 Appendix A-7 Methods 24 and 24A, incorporated in 250-RICR-120-05-19.4 and, further, 40 CFR 60 Appendix A-7 Methods 24 and 24A, incorporated in 250-RICR-120-05-19.4 apply to multicomponent coatings.
 - a. Manufacturer’s formulation data may be used to demonstrate compliance with VOC content limitations in lieu of 40 CFR 60, Appendix A-7, Methods 24 testing, incorporated in 250-RICR-120-05-19.4. In the case of a dispute, the VOC content determined using 40 CFR 60, Appendix A-7.
2. The VOC content of the as applied coating, expressed in units of pounds of VOC per gallon of coating, shall be calculated using equation 1:

Equation 1

$$VOC = \frac{(W_v + W_a - W_w - W_n)}{(V + V_a - V_w - V_n)}$$

Where:

- VOC = The VOC content of a given coating, in pounds per gallon (lbs./gal);
- W_v = Mass of total volatiles, in pounds;
- W_a = Mass of total VOC in additives or other materials that are added to the coating prior to its application, in pounds;
- W_w = Mass of the water in coating (if any), in pounds;
- W_n = Mass of any non-VOC solvent in the coating, in pounds;
- V = Volume of coating, in gallons;
- V_a = Volume of VOC-containing additives or other materials that are added to the coating prior to its application, in gallons;
- V_w = Volume of the water in coating (if any), in gallons; and
- V_n = Volume of any non-VOC solvent in the coating, in gallons.

D. Recordkeeping Requirements

1. The permittee shall keep and maintain records sufficient to determine actual VOC and HAP emissions from the entire facility for the previous 12 months. All purchase orders, invoices, including those records listed below and other documents to support the determination of actual VOC and HAP emissions shall be maintained and be made available to the Office of Air Resources upon request.

2. The permittee shall, on a monthly basis, no later than 15 days after the first of the month, determine the total quantity of VOC discharged to the atmosphere from all operations at the entire facility. Monthly and 12-month rolling averages shall be calculated. The 12-month rolling average shall be used for comparison with emission limitations. The permittee shall keep records of this determination and provide such records to the Office of Air Resources upon request.
3. The permittee shall, on a monthly basis, no later than 15 days after the first of the month, determine the total quantity of HAP emissions discharged to the atmosphere from all operations at the entire facility. Monthly and 12-month rolling averages shall be calculated. The 12-month rolling average shall be used for comparison with emission limitations. The permittee shall keep records of this determination and provide such records to the Office of Air Resources upon request.
4. The permittee shall maintain records of information sufficient to determine compliance with Conditions A.1.b(1-2) of this permit, including at minimum the following information for each calendar month for each coating line or operation:
 - a. The name, description (coating category) and amount used of each coating, on each coating line or operation;
 - b. The type and amount of solvent used for diluents and cleanup operations;
 - c. The mass of VOC per volume of each coating minus water and exempt compounds (excluding water), as applied, used each month on each coating line or operation;
 - d. The mass of HAP per volume of each coating used, as applied; and,
 - e. A Safety Data Sheet, a Certified Product Data Sheet or equivalent for each coating, diluent or cleaning solvent used.
5. All records required in this emission cap shall be maintained for a minimum of five years after the date of each record and shall be made available to the Office of Air Resources or its representative upon request.

E. Reporting Requirements

1. The permittee shall notify the Office of Air Resources in writing, within 15 days of determining that the total quantity of VOCs discharged to the atmosphere from all operations at this facility exceeds 8,167 pounds per calendar month (12-month rolling average).
2. The owner/operator shall notify the Office of Air Resources in writing, within 30 days, whenever the total quantity of HAP emissions discharged to the atmosphere from the entire facility exceeds 1,500 pounds of any one HAP or 4,000 pounds of any combination of HAPs per calendar month, based upon a 12-month rolling average.
3. The permittee shall notify the Office of Air Resources of any record showing use of any non-complying coatings by sending a copy of such record to the Office of Air Resources within thirty (30) calendar days following that use.

4. The permittee shall notify the Office of Air Resources at least thirty (30) calendar days before changing the methods of compliance. If changing the method of compliance triggers any permitting regulations or permitting thresholds specified in “Air Pollution Control Permits” 250-RICR-120-05-9, a preconstruction permit maybe required prior to changing the method of compliance.
5. The permittee shall register annually with the Office of Air Resources. This requirement may be fulfilled by submission of the annual air pollution inventory required in “Recordkeeping and Reporting” 250-RICR-120-05-14, by April 15th of each year, the following information shall be submitted:
 - a. The name and address of the company and name and telephone number of a responsible corporate official submitting the registration;
 - b. A description of all operations in the facility where VOC’s are emitted;
 - c. Quantities of coatings, solvents, dissolvers, viscosity reducers, diluents, thinners, reagents, cleaning agents, enamels, lacquers or paints consumed during the previous calendar year; and,
 - d. The amount of volatile organic compound per gallon of coating solution (pounds per gallon) for each coating, enamel, lacquer, or paint consumed at the facility during the calendar year of record.
6. The permittee shall notify the Office of Air Resources in writing of any planned physical or operational change to any equipment that would:
 - a. Change the representation of the facility in the emissions cap application.
 - b. Alter the applicability of any state or federal air pollution rules or regulations.
 - c. Result in the violation of any terms or conditions of the emissions cap.
 - d. Qualify as a modification under 250-RICR-120-05-9.Such notification shall include:
 - Information describing the nature of the change.
 - Information describing the effect of the change in the emission of any air contaminant.
 - The scheduled completion date of the planned change.Any such change shall be consistent with the appropriate regulations and have the prior approval of the Office of Air Resources.
7. The permittee shall notify the Office of Air Resources of any anticipated noncompliance with the terms of this emission cap or any other applicable air pollution control rules and regulations.

F. Other Requirements

1. Employees of the Office of Air Resources and its authorized representatives shall be allowed to enter the facility at all times for the purpose of inspecting any air pollution source, investigation any condition it believes may be causing air pollution or examining any records required to be maintained by the Office of Air Resources.
2. The Office of Air Resources may reopen and revise this emission cap if it determines that:
 - a. A material mistake was made in establishing the operating restrictions; or
 - b. Inaccurate emission factors were used in establishing the operating restrictions; or
 - c. The emissions cap must be revised to ensure that emissions from this facility do not exceed any of the applicability thresholds in 250-RICR-120-05-29.
3. The owner/operator is subject to the requirements of 40 CFR 63, Subpart A (General Provisions), Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines) and Subpart XXXXXX (National Emission Standards for Hazardous Air Pollutants Area Sources Standards for Nine Metal Fabrication and Finishing Categories). Compliance with all applicable provisions therein is required.