Facility Name _____ Contact _____ Phone _____ Email _____

Check off all the boxes in each column that apply to your facility so that proper air pollution estimates can be made. If applicable, you can select more than one box in each column. For definitions see page 2. For further clarifications about Surface Coating Operations refer to Part 19: Control of Volatile Organic Compounds from Surface Coating Operations (250-RICR-120-05-19).

Surface Coating Operation

- ☐ Coil Coating
- ☐ Fabric Coating
- ☐ Vinyl Coating
- ☐ Flatwood Paneling Coating
- ☐ Large Appliance Coating
- ☐ Magnet Wire Coating
- ☐ Metal Furniture Coating
- ☐ Wood Furniture Coating
- ☐ Miscellaneous Metal Parts Coating
- ☐ Miscellaneous Plastic Parts Coating
- ☐ Paper Coating
- ☐ Film Coating
- ☐ Foil Coating
- ☐ Steel Drum Coating
- ☐ Automotive/transportation Coating
- ☐ Business Machinery Coating
- ☐ Pleasure Craft Coating
- ☐ Wood Products Manufacturing

(See regulation Part 35 or 250-RICR-120-05-35 for applicability)

- ☐ Other (specify):_____

Application Process

- ☐ Electrostatic spray
- ☐ HVLP spray
- ☐ Flow coat
- ☐ Roller
- ☐ Dip (includes electrodeposition)
- ☐ Airless spray
- ☐ Rotary screen (fabric coating)
- ☐ Flat screen (fabric coating)
- ☐ Stencil
- ☐ Air dried
- ☐ Baked
- ☐ Exterior parts
- ☐ Interior parts
- ☐ Vacuum-metalizing
- ☐ Aerosol
- ☐ Powder
- ☐ Pretreatment
- ☐ Other (specify):_____

Coating Type

- ☐ General (1 component)
- ☐ General (multi-component)
- ☐ Extreme high gloss
- ☐ Extreme performance
- ☐ Heat resistant
- ☐ Solar absorbent
- ☐ Metallic
- ☐ Stain
- ☐ Fog coat
- ☐ Texture coat
- ☐ Adhesive
- ☐ Clear coat
- ☐ Electric-insulating varnish
- ☐ Architectural
- ☐ Military
- ☐ Sealer
- ☐ Filler
- ☐ Primer
- ☐ Topcoat
- ☐ Flexible
- ☐ Basecoat
- ☐ Other (specify):_____

If applicable to your facility, check the boxes below. If not, leave blank.

- ☐ Mixing Room: personnel mix formulations to specifications
- ☐ Mixing Room: personnel only stir formulations already in drums
- ☐ Bulk Storage Tanks for VOCs other than fuel (specify how many:_____)
- ☐ Air Pollution Control Equipment: RIDEM approval No._____ No. of days operated (without malfunctions)_____

Definitions

Aerosol: a spraying coating method using a pressurized container with a gas propellant.
Air-dried: a method of drying the coating 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).
Airless spray: a coating spray application system using high fluid pressure, without compressed air, to atomize the coating.
Baked: a method of drying the coating by curing at a temperature at or above ninety degrees Celsius (90°C) or one hundred ninety-four degrees Fahrenheit (194°F).
Business machine: a device that uses electronic or mechanical methods to process information, perform calculations, and print or copy information or convert sound into electrical impulses for transmission.
Dip application: a method of applying a coating by surface submersion into and removal from a coating bath.
Electrostatic spray: a method of applying a coating by electrically charging the coating particles or coating droplets.
Flow coating: a non-atomized technique of applying coating to a substrate using a fluid nozzle in a fan pattern with no air supplied to the nozzle.
HVLP spray: a method of applying a coating using a high-volume, low-pressure spray application system that is designed to operate at air pressures between 0.1 and 10 pounds per square inch gauge.
Large appliance coating: the application of a coating to the surface of component metal parts (including, but not limited to, doors, cases, lids, panels and interior parts) of any residential or commercial washer, dryer, freezer, range, refrigerator, water heater, dishwasher, trash compactor, air conditioner, or other similar products.
Pleasure craft: any marine or freshwater vessel manufactured or operated primarily for recreational purposes.
Powder coating: a type of electrostatic coating process using a dry powder without a solvent and cured into a uniform coat.
Pretreatment: a process where a coating or wash primer is applied directly to fiberglass or metal surfaces to provide surface etching, adhesion, corrosion resistance, and ease when stripping.
Roller application: a coating method using a machine that continuously transfers coating on to the substrate through a set of oppositely rotating rollers.
Stencil coating: a coating that is applied over a stencil to a substrate at a thickness of one mil or less of coating solids. Stencil coats are most frequently letters, numbers, or decorative designs.
Vacuum metalizing: the process of evaporating metals inside a vacuum chamber and depositing them on a substrate to achieve a uniform metalized layer.

For Additional Definitions refer to Part 19: Control of Volatile Organic Compounds from Surface Coating Operations (250-RICR-120-05-19).

Rhode Island Department of Environmental Management

2022 Air Pollution Inventory

Surface Coating Basic Spreadsheet

_____ _____ _____ **Check one:** ☐ Air Dried ☐ Baked

Facility Name Substrate Application Process (see first page for reference)

Please fill in the Table below with information on your facility's coatings for the above-mentioned Application Process. Report Air Dried and Baked coatings on separate Tables. Fill in a new Table for each different Application Process and/or Substrate. Attach the SDS for each coating listed.

Coating Formulation Name	Coating type (see pg 1 for reference)	Amount Used (gallons)	Total VOC in Coating (wt %)	Total VOC in Coating (lb/gal)	Density or Specific Gravity (lb/gal)	Solvent Component Name or CAS no. in coating (see coating's SDS) (wt %)	(wt %)	(wt %)	(wt %)	(wt %)

Information supplied on this form should be for calendar year 2022. You may find it helpful to contact your supplier/vendor to obtain all the required information. Most will supply you with a list of all purchases along with a copy of each product's SDS. The information received from your supplier/vendor may be submitted in lieu of filling out the Table only if the name of product, the amount used, and the application process are clearly identified with the attached SDS. The total VOC in the coating by weight percentage or the lbs of VOC per gallon can be found in the SDS or product data sheet. Report only coatings that you have purchased more than one gallon of in 2022. If the coating is thinned prior to application, please contact the Office of Air Resources for further directions. See page 4 for further Instructions on how to fill in the Table above.

Instructions for the Table

Coating Formulation Name

Fill in this box with the product name of a coating that your facility used. This is generally located in Section 1 (Identification) of the Safety Data Sheet for the coating.

Coating Type

Fill in this box with the coating type. This is what your facility used the coating for, and this information can also be found in Section 1 (Identification) of the Safety Data Sheet.

Amount Used

Fill in this box with the amount of this coating your facility used. This can be determined from adding the amount your facility stored in the beginning of January to the amount your facility purchased from your suppliers during the year, then subtracting the remaining amount your facility stored at the end of December. If your facility does not carry inventory at the beginning or end of the year, then submit only the purchased amount.

Total VOC in Coating (wt %) and/or Total VOC in Coating (lb/gal)

Fill in one or both boxes. The total Volatile Organic Compound content in the coating is recorded as a weight percentage (wt %) and/or density (lb/gal) and can be found in Section 9 (Physical and Chemical Properties) of the Safety Data Sheet.

Density or Specific Gravity

Fill in this box with the density or specific gravity of the coating. The density is recorded as lb/gal or g/mL while the specific gravity is without units and usually between 0.7 and 1.5. This information is located in Section 9 (Physical and Chemical Properties) of the Safety Data Sheet.

Solvent Component Name or CAS no. in Coating (see coating's SDS)

The information for this section of the Table can be found in Section 3 (Composition/Ingredients) of the Safety Data Sheet. Each known component of the formulation is recorded with common name and/or a CAS number and its weight percentage (wt %) in the formulation. For each formulation component that is a VOC, write either the component's name or CAS number in the space above the (wt %) and then record the weight percentage of the component in the coating underneath. Only record the weight percentages of that component for each coating in that column. Use a different column for each component. If you need to add columns for more VOC components in the coating, fill out another Table with an indication that this is a continuation of the coatings in the first Table.

Rhode Island Department of Environmental Management

2022 Air Pollution Inventory

Supplemental Chemical Use Survey

Page _____ of _____

_____

Facility Name

_____ _____

Signature of Person Completing Form Date

Note: Report only those substances used at the facility which have <u>not</u> been reported on the Surface Coating/Printing/Formulation Use Spreadsheet.

VOC or Regulated Substance Name & CAS Number			
	CAS:	CAS:	CAS:
Type of Operation			
Starting Inventory* (1/1/2022)			
Amount Purchased in 2022			
Ending Inventory* (12/31/2022)			
Amount Manifested and % of that manifested waste which was the Regulated Substance*			
	%	%	%
Amount of Substance Released to Air			
Air Pollution Control Equipment and Approval No.	Type: Appr. No.:	Type: Appr. No.:	Type: Appr. No.:
Capture Efficiency (Percent)			
Overall Efficiency (Percent)			

*If known (attach additional sheets if necessary)

Return to: Air Pollution Inventory, Office of Air Resources,
235 Promenade Street, Providence, RI 02908-5767
DEM.AirInventory@dem.ri.gov

Instructions for Supplemental Chemical Use Survey

Regulated Substance - List all Volatile Organic Compounds (VOC) **and** all chemicals listed on the list entitled "Listed Toxic Air Contaminants" that were used at and/or emitted from the facility. Provide a CAS number, usually available on your MSDS. **Please note that all miscellaneous volatile organic compounds (VOCs) used in excess of 100 pounds must be reported even if the name is not specifically listed on the Listed Toxic Air Contaminants List.**

Type of Operation - Describe the process in which the listed substance was used (for example, degreasing, plating, wipe cleaning, etc.).

Starting Inventory - Report the amount of the substance present on site at the start of the year, if known. State whether the amount is given in pounds or gallons. Please provide data in pounds if possible.

Amount Purchased - Report the amount of the substance purchased in the year and indicate whether the number given is in pounds or gallons. Again, provide data in pounds if possible.

Ending Inventory - Report the amount of the substance present on site at the end of the year, if known. State whether the amount is given in pounds or gallons.

Amount Manifested - Report the amount (in pounds) of the regulated substance which was manifested as hazardous waste and the percentage of that waste that was this chemical.

Amount of Substance Released to Air - Calculate the amount of the substance emitted to air. Include both fugitive and stack emissions. **Attach documentation of the calculations used.** You may find it necessary to make other mass balance adjustments such as an amount disposed in a landfill or discharged to a POTW. Label carefully.

Describe Air Pollution Control Equipment - Provide a short description of the equipment used to control emissions of the regulated substance, if any. Examples follow:

Type: Carbon adsorber, venturi scrubber, VOC incinerator, baghouse, etc.
Include RI DEM Approval Number, if known.

Capture: Give the capture efficiency for this chemical.

Overall: Give the overall control efficiency of the control equipment for this chemical.
Overall Efficiency = Capture Efficiency x Destruction or Recovery Efficiency

Note: On a separate sheet, please provide any additional information pertinent to your processes or air pollution control equipment that will assist us in calculating an accurate emissions estimate from your facility for this reporting year.