

**Rhode Island Department of Environmental Management  
2017 Air Pollution Inventory**

Mass Balance Reporting Form  
(Instructions on Reverse)



Page \_\_\_\_ of \_\_\_\_

\_\_\_\_\_  
Facility Name

\_\_\_\_\_  
Signature of Person Completing Form

\_\_\_\_\_  
Phone

\_\_\_\_\_  
Date

*For each Volatile Organic Compound or regulated substance, provide the following information. Attach additional sheets if necessary. **You may substitute a spreadsheet for this page.***

|  |               |               |               |
|--|---------------|---------------|---------------|
| VOC or Regulated Substance Name & CAS Number                               |               |               |               |
|  | CAS:          | CAS:          | CAS:          |
| Type of Operation  |               |               |               |
| Beginning Inventory (1/1/2017)   |               |               |               |
| Amount Purchased   |               |               |               |
| Ending Inventory (12/31/2017)  |               |               |               |
| Amount Manifested and % of that waste that was this chemical               |               |               |               |
|  | %             | %             | %             |
| Amount Retained in Product   |               |               |               |
| Amt. discharged to POTW (name): _____                                      |               |               |               |
| Other Mass Balance Adjustments (specify)                                   |               |               |               |
| Amount of Substance Released to Air  |               |               |               |
| Describe Air Pollution Control or Recovery Equipment Pertinent to Chemical | Type:         | Type:         | Type:         |
|  | Approval No.: | Approval No.: | Approval No.: |
| Capture Efficiency %   |               |               |               |
| Destruction or Recovery Efficiency %                                       |               |               |               |
| Overall Efficiency %   |               |               |               |

Return to: Air Pollution/Toxics Inventory, Office of Air Resources,  
235 Promenade Street, Providence, RI 02908-5767

Air Pollution Inventory Form J

## Instructions for Mass Balance Reporting Form

In a basic mass balance formula, the amount of chemical manifested plus the amount left in the product is subtracted from the amount purchased or used to result in the amount emitted or released. Boxes are provided for itemizing typical mass balance data. Please modify the form to suit your specific needs. You may substitute a printout of a spreadsheet you have already developed. **Please convert your data to pounds if possible.**

*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 kind of process in which the substance was used. Examples: degreasing, plating, wipe cleaning, rotogravure printing, etc.

*Beginning Inventory* - Report the amount of the substance present on site at the start of the year, if known. Include units (pounds, gallons). **Please provide data in pounds if possible.**

*Amount Purchased* - Report the amount of the substance purchased or otherwise acquired during 2017. Include units (pounds, gallons). **Please convert your data to pounds if possible.**

*Ending Inventory* - Report the amount on site at the end of the year, if known. Include units (pounds, gallons). **Please convert your data to pounds if possible.**

*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 Retained in Product* - Indicate the amount of substance which became part of a finished product and was not emitted during or after production. You may be asked to substantiate this.

*Amount Discharged to a Publicly Owned Treatment Plant* - Report the amount discharged and the name of the treatment plant to which it was discharged.

*Other Mass Balance Adjustments* - Specify amount and whether it should be added or (subtracted). An example may be the amount disposed of as non-hazardous waste in a landfill. Label carefully.

*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.**

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

Type: Incinerator, Venturi Scrubber, Cartridge Baghouse, etc.

Approval. No: Provide your RIDEM Air Pollution Construction Permit Approval Number.

Capture: List the capture efficiency for this chemical.

Destruction or Recovery Efficiency: List if known.

Overall: List the overall control efficiency of the equipment for this chemical.

Overall Efficiency = Capture Efficiency x Destruction or Recovery Efficiency