

# PRINTING OPERATIONS

## Material Usage Sheet for Documenting Method of Compliance

The Florida Department of Environmental Protection is providing this worksheet to interested owners or operators of printing operations as a tool which may be used as an attachment to the Printing Operations Air General Permit Registration Form, DEP Form No. 62-210.920(1)(f). Use or non-use of this worksheet does not affect eligibility or compliance status of any printing operation subject to Chapter 62-210, Florida Administrative Code (F.A.C.)

### Initial Registration

Provide the method (mass balance or material usage rates) expected to be used to demonstrate compliance with Rule 62-210.310(4)(f)2., F.A.C. Provide the estimated amount of materials containing hazardous air pollutants and solvent-containing materials expected to be used over a 12-month period. Check box A, B or C.

(Note: The method of compliance may be changed at any time provided that records are maintained to demonstrate compliance with the appropriate requirement at the time of change and thereafter.)

### MASS BALANCE

- A.** Keep records of material usage and calculate, for each calendar month and each consecutive twelve months, the emissions of volatile organic compounds, individual hazardous air pollutants and total combined hazardous air pollutants to document emissions do not exceed the following in any consecutive twelve months:
- 80 tons of volatile organic compounds
  - 8 tons of any individual hazardous air pollutant, or
  - 20 tons of any combination of hazardous air pollutants

### MATERIAL USAGE

- B. Single Process** - Keep records of material usage for each calendar month and each consecutive twelve months to demonstrate compliance with these limitations. Use less than 1,333 gallons of materials containing any hazardous air pollutants **and** do not exceed the following material usage limitations in any consecutive twelve months (check **only** one box 1 – 6 below):
- 1. Heatset Offset Lithographic Only** - Use less than 100,000 pounds of ink, cleaning solvent and fountain solution additives combined. Estimated pounds: \_\_\_\_\_
- 2. Non-Heatset Offset Lithographic Only** - Use less than 14,250 gallons of cleaning solvent and fountain solution additives combined. Estimated gallons: \_\_\_\_\_
- 3. Digital Only** - Use less than 12,100 gallons of solvent based inks, cleanup solutions and other solvent-containing materials combined. Estimated gallons: \_\_\_\_\_
- 4. Screen or Letterpress Only** - Use less than 14,250 gallons of solvent based inks, clean-up solutions and other solvent-containing materials combined Estimated gallons: \_\_\_\_\_
- 5. Water Based and/or Ultraviolet Cured Flexographic and/or Rotogravure Only** - Use less than 400,000 pounds of water-based inks, coatings and adhesives, combined. Estimated pounds: \_\_\_\_\_
- 6. Solvent Based Flexographic and/or Rotogravure Only** - Use less than 100,000 pounds of inks, dilution solvents, coatings, cleaning solutions and adhesives, combined. Estimated pounds: \_\_\_\_\_
- C. Combination of Heatset Offset Lithographic, Non-Heatset Lithographic, Digital, Screen or Letterpress, Rotogravure or Flexographic** - Use no more than 1,333 gallons of materials containing any hazardous air pollutants and no more than the most stringent of the material usage limitations of B.1 – B.6 above for the type of printing lines at the facility. For purposes of determining which limit is the most stringent, the pounds of materials used for heatset offset lithographic lines and flexographic lines shall be converted to the equivalent gallons by dividing by 8.5 pounds per gallon and shall be compared with the limits for non-heatset offset lithographic, digital, screen and letterpress lines, as applicable, for the type of printing lines at the facility. The most stringent limit shall apply to the total of all solvent-containing material used. Most stringent limit: \_\_\_\_\_

## Re-Registration

Below, provide the highest 12-month total quantity of materials containing hazardous air pollutants and the highest 12-month total quantity of solvent-containing materials used in the last five years to show compliance with sub-subparagraph 62-210.310(4)(f)2.b., F.A.C. (material usage rates) or calculated emissions to show compliance with sub-subparagraph 62-210.310(4)(f)2.a., F.A.C. (mass balance). Check box A, B or C.

### MASS BALANCE

**A.** – Records of material usage show the following emissions of volatile organic compounds, individual hazardous air pollutants and total combined hazardous air pollutants in any consecutive twelve months: (Provide calculations as an attachment to this form.)

- Tons of volatile organic compounds = \_\_\_\_\_ tons.
- Tons of any individual hazardous air pollutant= \_\_\_\_\_ tons.
- Tons of any combination of hazardous air pollutants= \_\_\_\_\_ tons.

### MATERIAL USAGE

**B. Single Process** - Gallons of materials containing any hazardous air pollutants = \_\_\_\_\_ gallons **and** material usage of (check *only* one box 1 – 6 below):

- 1. Heatset Offset Lithographic Only** - Pounds of ink, cleaning solvent and fountain solution additives combined used = \_\_\_\_\_ pounds.
- 2. Non-Heatset Offset Lithographic Only** - Gallons of cleaning solvent and fountain solution additives combined used = \_\_\_\_\_ gallons.
- 3. Digital Only** - Gallons of solvent based inks, cleanup solutions and other solvent-containing materials combined used = \_\_\_\_\_ gallons.
- 4. Screen or Letterpress Only** - Gallons of solvent based inks, clean-up solutions and other solvent-containing materials combined used = \_\_\_\_\_ gallons.
- 5. Water Based and/or Ultraviolet Cured Flexographic and/or Rotogravure Only** - Pounds of water-based inks, coatings and adhesives, combined used = \_\_\_\_\_ gallons.
- 6. Solvent Based Flexographic and/or Rotogravure Only** - Pounds of inks, dilution solvents, coatings, cleaning solutions and adhesives, used = \_\_\_\_\_ pounds.

**C. Combination of Heatset Offset Lithographic, Non-Heatset Lithographic, Digital, Screen or Letterpress, Rotogravure or Flexographic** - Gallons of materials containing any hazardous air pollutants used = \_\_\_\_\_ gallons. The most stringent of the material usage limitations of B.1 – B.6 above for the type of printing lines at the facility is = \_\_\_\_\_ .  Pounds or  Gallons (Check One)  
Quantity of all solvent-containing material used is = \_\_\_\_\_ .  Pounds or  Gallons (Check One)