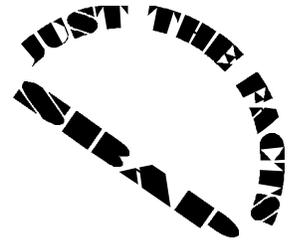




PUBLICATION, PRODUCT, AND PACKAGING ROTOGRAVURE AND WIDE-WEB FLEXOGRAPHY



SMALL BUSINESS ASSISTANCE PROGRAM

WHY IS EPA WORKING WITH PRINTERS?

Under Section 112 of the Clean Air Act of 1990, the United States Environmental Protection Agency (EPA) has established National Emissions Standards for Hazardous Air Pollutants (NESHAPS) for the printing and publishing industry (40 CFR Part 63, Subpart KK).

Many products used by the printing and publishing industry contain some of the 188 regulated hazardous air pollutants (HAPs); such as, **toluene, xylene, ethyl benzene, methyl ethyl ketone, methyl isobutyl ketone, methanol, ethylene glycol, and certain glycol ethers.** As the use of these products is often minimal in the printing industry, a facility may qualify as an **area source.**

IS MY SHOP AN AREA SOURCE?

To qualified as an area source, a facility must meet the following requirements:

- ◆ **Emits less than 10 tons (20,000 lbs.) per each rolling 12-month period of any individual HAP.**

and

- ◆ **Emits less than 25 tons (50,000 lbs.) per rolling 12-month period of any combination of HAPs.**

WHAT ARE THE REQUIREMENTS FOR AN AREA SOURCE?

Area sources are required to keep monthly records of all measurements and calculations needed to demonstrate compliance as an area source. This includes the mass (weight) of all HAP containing materials used and the mass fraction (% by weight) of HAPs present in each material used. The monthly records are used to create a rolling 12-month period total. All records should be maintained on-site for at least five years.

The mass (weight) of HAP containing material used and the mass fraction (% by weight) of individual HAPs in a given material can be obtained from a Certified Product Data Sheet (CPDS), Material Safety Data Sheets (MSDS), or from the product's label. CPDS and MSDS can be obtained from your supplier, manufacturer, or an outside laboratory.

WHEN MUST I COMPLY WITH THE REGULATIONS?

Area Source

Existing facilities that started operations prior to March 14, 1995, have until **May 30, 1998**, to meet the NESHAP requirements for area sources. For a new facility that started construction on or after March 14, 1995, the compliance date is date of start-up or May 30, 1996, whichever is later.

Major Source

A facility that exceeds the limits for an area source and becomes a major source of HAPs, must comply with more stringent regulations. Call the Small Business Assistance Program at **1-800-SBAP-HLP (1-800/722-7457)** for further guidance.

POLLUTION PREVENTION?

Pollution prevention practices include such things as the elimination, waste minimization or on-site recycling of printing materials (inks, coatings, varnishes, adhesives, primers, solvents, thinners, reducers, wipes, and other materials used in this industry).

Waste from printing operations may be generated from plate preparation, photoprocessing, printing, and cleanup.

Practice good **pollution prevention** by:

Reducing the Need for Cleaning

Coordinate printing runs by type, quantity, and color, thereby reducing the number of cleanups.

- Run similar jobs to reduce cleanup.

Use Alternative Solvents

Avoid inks and cleaners with solvents or chemicals that are classified as hazardous waste. Use inks and cleaners with low VOC content.

- Use water base inks.
- Use soy based inks

Reduce Solvent Use In Cleanup

Alternative chemicals may reduce the amount of solvents used and minimize hazardous waste.

- Use automatic blanket washes.

Good Housekeeping Practices

Good housekeeping can reduce the amount of materials used.

- Cover solvent containers to prevent evaporation.
- Log solvent and ink usage at presses.
- Reuse inks.
- Buy inks only when necessary.

Collect Solvent Waste for Recycling

Use efficient methods of collecting while preventing spills.

- Use drain trays.
- Use funnels with covers to decrease spills and prevent evaporation.
- Use parts washers in a closed loop system to recirculate solvents. This will also reduce overspray and eliminate wipe-up towels or rags.

For on-site **pollution** prevention assistance, please call the Pollution Prevention Section at **904/488-0300**.

SHOULD I BE CONCERNED ABOUT HAZARDOUS WASTES?

Yes, many of the same chemicals that are identified as hazardous air pollutants can also be classified as hazardous waste. Hazardous waste is classified by chemical name and the following characteristics: ignitable, toxic, corrosive and reactive. Information on the product composition, physical and chemical handling procedures and protective clothing can be obtained from a material data safety sheet (MSDS).

Products containing 10% or more by volume of **methyl isobutyl, methanol** or **xylene** are classified as an ignitable waste. Products containing 10% or more by volume of **toluene, benzene, or methanol ethyl ketone** are classified as both an ignitable and toxic waste. Some inks contain pigments with heavy metals (i.e., cadmium, lead or chromium) that are considered hazardous waste. Inks can also become hazardous waste if mixed with solvents which are classified as hazardous waste.

Depending on the amount of hazardous waste your shop produces, your shop may be classified as one the following categories of hazardous waste generators:

- Conditionally Exempt Small Quantity Generator
- Regulated Small Quantity Generator
- Generator

(continued on next page)

For many print shops, it has been the practice to obtain a hazardous waste generator identification number. The number is used to track the handling, transport, and disposal of hazardous waste. For more information on hazardous waste generator classifications or to obtain a hazardous waste generator identification number, contact the **Hazardous Waste Section at 904/488-0300**.

Be sure to check with your local environmental programs, since they may also have additional county requirements. The best practice is to ✓check regardless of where the facility is located. Local regulations can change more quickly than state or federal regulations.

ARE THERE OTHER REGULATIONS THAT I MUST MEET?

The disposal of wastewater is another issue you must address. The primary wastewater concerns involve the discharge of silver from photoprocessing equipment, other metals from inks, and toxic organics associated with solvents. Wastewater discharges must be treated or otherwise controlled through management practices to meet surface water and ground water quality standards. Any direct discharges to ground water or surface water must be coordinated with the Department of Environmental Protection district office. The Industrial Waster Program in each district is responsible for issuing permits for these discharges. No industrial process waste (including photochemicals I developers, fixer, stabilizers, or rinsewater) may be discharged to a septic tank or other on-site sewage disposal system.

If your facility's wastewater is discharged to a public or private wastewater utility, the discharge of metals and toxic organics typically is controlled by receiving wastewater treatment facility's local sewer use ordinance. In general, all silver-bearing wastes including rinsewater, developer and bleach, must be treated by a properly designed and operated silver recovery unit (SRU). However, even proper SRU treatment may not ensure compliance with discharge limits in some locations. Total containment and hauling of silver-bearing wastes and rinsewater may be necessary. You should contact your local utility to determine the steps necessary to meet these local

considerations, including securing any required permits or authorization.

WHERE CAN I GET MORE INFORMATION?

EPA has developed several fact sheets and booklets on the printing and publishing industry. The following is a sample list of materials that may be obtained by calling **SBAP at 1-800-SBAP-HLP or (1-800-722-7457)**.

The SBAP has a videoconference course notebook, "Green and Profitable Printing" available for owners of print shops. This book is designed to educate small business owners on key environmental issues affecting small print shops, examine practical opportunities to lower costs and reduce waste, process controls and provide additional resources for information and assistance.

Booklets Available

- ◆ Profile of The Printing Industry
- ◆ Ultrasonic Cleaning of Rotogravure Cylinders
- ◆ Small Quantity Generator Handbook

Fact Sheets Available

- ◆ Management of Solvents and Wipes in the Printing Industry
- ◆ Silver Recovery
- ◆ Reading and Using A Material Safety Data Sheet (MSDS)

RECORDKEEPING

Recordkeeping can be accomplished by keeping a material tracking log and MSDS and CPDS of the products on hand. An example of a materials tracking log can be created in different styles to accommodate a facility's need.



