

May 15, 1996

FACT SHEET

FINAL AIR TOXICS REGULATION FOR THE PRINTING AND PUBLISHING INDUSTRY

TODAY'S ACTION...

- ◆ The Environmental Protection Agency (EPA) is issuing a final regulation to reduce emissions of air toxics from the printing and publishing industry. Air toxics are those pollutants known or suspected of causing cancer or other serious health effects.
- ◆ EPA's final regulation covers two distinct segments of this industry. Publication rotogravure printers produce saleable paper products such as catalogues, magazines, newspaper inserts, and telephone directories. Package-product rotogravure and wide-web flexographic facilities print on paper, plastic film, metal foil, and vinyl for use in products such as flexible packaging, labels, gift wrap, floor coverings, and decorative laminates. Air toxics are released from the ink systems used by these types of printers.
- ◆ Today's action demonstrates EPA's commitment to making pollution prevention an integral part of regulatory actions whenever possible. EPA's final regulation may be met through substitution of non-toxic materials for air toxics, capture and control of air toxics emissions, or a combination of these approaches.

WHAT ARE THE HEALTH AND ENVIRONMENTAL BENEFITS?

- ◆ EPA's final regulation will reduce emissions of a number of air toxics from the printing industry, including toluene, xylene, methanol, and hexane. Exposure to these and other air toxics associated with rotogravure and flexographic printing can cause adverse health effects, including eye, nose, throat, and skin irritation; damage to the heart, liver, kidneys, and blood cells.
- ◆ Air toxics emissions will be reduced from publication rotogravure printers by about 5,200 tons annually, representing a 30 percent reduction from current levels. Air toxics emissions will be reduced from package-product rotogravure and wide-web flexographic printers by about

2,100 tons annually, representing a 40 percent reduction from current levels.

HOW IS THE FINAL REGULATION RELATED TO EPA'S "COMMON SENSE" INITIATIVE?

- ◆ EPA's "Common Sense" Initiative involves a comprehensive examination of six industrial sectors, including the printing and publishing industry. Through this program, which was launched in 1994, EPA works with selected industries, environmental and public interest groups, State regulators and other stakeholders to improve the environment, while reducing the economic impact of its programs. The program focuses on improving and streamlining six specific areas, including regulation development, pollution prevention, and recordkeeping and reporting.
- ◆ EPA's final printing and publishing regulation incorporates many principles of the Common Sense Initiative. The final regulation includes flexible compliance options, emphasizes pollution prevention measures, and contains simplified recordkeeping and reporting requirements.

BACKGROUND

- ◆ Under the Clean Air Act Amendments of 1990, EPA is required to regulate emissions of 189 listed toxic air pollutants. On July 16, 1992, EPA published a list of source categories that emit one or more of these air toxics. For listed categories of "major" sources (those that have the potential to emit 10 tons/year or more of a listed pollutant or 25 tons/year or more of a combination of pollutants), the Clean Air Act requires EPA to develop standards that will require the application of stringent air pollution controls, known as maximum achievable control technology (MACT).
- ◆ EPA's published list of industry groups (known as "source categories") to be regulated includes major sources in the printing and publishing industry, including

publication rotogravure printers and package-product rotogravure and wide-web flexographic printers.

WHAT ARE THE MAIN COMPONENTS OF THE FINAL REGULATION?

- ◆ EPA's final rule establishes emission limits for publication rotogravure printing and package-product rotogravure/wide-web flexographic printing, and provides industry with several compliance options. Facilities may comply with the rule's requirements through the use of pollution prevention methods, which allow printers to eliminate the use of toxic chemicals by substituting non-toxic chemicals for toxic ones; traditional emissions capture and control equipment; or a combination of the two compliance options.
- ◆ EPA's final regulation outlines the monitoring, recordkeeping, and reporting requirements. Existing facilities will have three years to comply with the rule.

HOW DOES THE FINAL REGULATION PROVIDE FLEXIBILITY TO INDUSTRY?

- ◆ EPA's final regulation allows for the use of inks, coatings, and other materials that contain low quantities of hazardous air pollutants without having to install additional control equipment. This provides a pollution prevention approach to compliance. Since most hazardous air pollutants used by printers are also volatile organic compounds (VOCs), most materials that contain low amounts of VOCs also contain low amounts of hazardous air pollutants. VOCs are the prime ingredient in forming ground-level ozone (smog). The use of materials that contain low amounts of VOCs has provided a popular, alternative method for printers to meet State and Federal VOC emission requirements without the costs of additional control equipment. The pollution prevention options in EPA's final rule build upon this alternative method for meeting VOC emissions requirements by extending it to hazardous air pollutants.
- ◆ The final regulation allows all affected facilities to assess compliance across all of the printing presses present at the facility. In the proposed regulation, compliance was assessed for package-product rotogravure/wide-web flexographic printing facilities on a press-by-press basis. The multi-press approach in the final regulation will allow for the most cost-effective

reduction of hazardous air pollutant emissions and provide printers with the most flexibility in scheduling production in their facilities.

WHO WILL BE AFFECTED BY THE FINAL REGULATION?

- ◆ EPA's final regulation applies to about 200 printing and publishing facilities nationwide. This includes some facilities that are major sources because of non-printing activities and that emit only small amounts of hazardous air pollutants from printing operations. Simplified requirements for these facilities are included in the final rule.

HOW MUCH WILL THE FINAL REGULATION COST?

- ◆ The estimated industry-wide annualized costs of the final regulation are estimated at \$40 million. These costs include \$21 million per year for publication rotogravure printers and \$19 million per year for package and product rotogravure and wide-web flexographic printers. The annual costs associated with the final regulation could be considerably lower for facilities that use inks, solvents, and other materials that contain low amounts of hazardous air pollutants.
- ◆ The average end product price increases are estimated to be less than 1.5 percent for both rotogravure and wide-web flexographic printers.

FOR MORE INFORMATION...

- ◆ Anyone with a computer and a modem can download the rule from the Clean Air Act Amendments bulletin board of EPA's electronic Technology Transfer Network by calling (919) 541-5742 (look under "Recently Signed Rules"). For further information about how to access the board, call (919) 541-5384. For further information about the rule, contact David Salman of EPA's Office of Air Quality Planning and Standards at (919) 541-0859.