

Printing Inks and Municipal Sewer Use Bylaws

Many cities have sewer use bylaws to establish limits on the concentration of specified substances that can be discharged to municipal storm and sanitary sewer systems. In Toronto the bylaw also requires that each industrial establishment prepare a pollution prevention plan that addresses the use and discharge of these "Subject Pollutants" into any waste stream.

Members of the Canadian Printing Ink Manufacturers' Association make every effort to formulate environmentally responsible products using materials that pose minimal risk to health and the environment. Although the list of subject pollutants included in the bylaws of each jurisdiction may vary slightly, they are generally very similar. Some of the listed substances are known to be intentionally used in ink formulations to impart specific properties, or are part of more complex chemical compounds that give inks a distinctive colour.

These may include substances such as **Cobalt** used in small amounts in sheet-fed inks as a catalyst for drying; **Copper, Molybdenum,** and **Zinc** which may be part of the chemical structure of coloured or metallic pigments, or certain performance additives; certain **aromatic solvents** that may be used in blanket or roller washes; and **Alkyl phenols** used as dispersing aids or antioxidants.

The use or absence of subject pollutants in inks will vary and depend on the colour and types of ink being produced. Please contact your ink supplier if more detailed information is required for the products used in your facility.

Subject pollutants may also be detected as trace contaminants in almost any of the materials used in an industrial environment, including raw materials used by ink manufacturers. If any subject pollutants, that are not intentionally added, are present in printing inks they would be below any regulated minimums and would not contribute significant amounts in any waste stream.

The information provided is only related to the inks as supplied to your company. The amount of subject pollutants actually discharged to the sewer would depend on your specific process, chemicals used, plant design, equipment, and procedures for handling any effluent that may be generated. The amount of chemicals in the effluent is best determined through a detailed knowledge of your specific process or by chemical analysis of the discharge entering the sewers.

Printing inks are classified as liquid industrial wastes that should be disposed in accordance with the current waste regulations in your area. It is our recommendation that printing inks, whether vegetable-based, oil-based, solvent-based or water-based, should never be intentionally discharged directly to sewers and waterways.

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