



# You Asked About...

## Pollution Prevention For The Printing Industry

This checklist is designed to help you identify opportunities for pollution prevention in your business. Most of the pollution prevention practices identified here do not involve expensive, sophisticated technology making them easy to implement in any business from small shops to large plants.

To complete the checklist, check all of those boxes which describe practices that you use in your business. Write N/A next to any questions which do not apply. For a more comprehensive self-assessment see the ***Pollution Prevention Guide for Printers In Atlantic Canada.***

### General Operating Practices

#### ***Do you:***

- know municipal, provincial and federal acts and regulations that affect the printing industry?
- have a pollution prevention program in place?
- provide regular training for employees to assist them to comply with regulations and increase their knowledge of health, safety and environmental issues ?
- keep employees informed about the company's pollution prevention efforts and encourage their participation ?
- have a preventative maintenance program in place for all equipment?
- work with your customers to assist them to select green printing methods where appropriate ?

### Chemical Management

#### ***Do you:***

- have a chemical management plan in place?
- follow recommended labelling and storage procedures for chemical products?

- use recommended storage, treatment and disposal procedures for all fixers, developers, fountain solutions, inks, blanket and roller washes, solvents, and rinse- water?
- keep solvents and solvent saturated shop towels in closed containers to minimize evaporation and emissions of volatile organic compounds (VOCs)?
- use a safety can, pump or squirt bottle to deliver a controlled amount of solvent to a shop towel and spot wash instead of pouring solvent onto parts to be cleaned?
- properly reseal solvent, ink, and other containers?
- install system to prevent spills or leaks from entering sanitary or storm sewers?

### Purchasing

#### ***Do you:***

- control your inventory (first-in, first-out policy, minimum inventory)?
- buy recycled and recyclable products, wherever possible (e.g. paper, toner and ink cartridges)?
- buy environmentally friendly products/services (e.g., EcoLogo)?
- work with suppliers to eliminate, reduce or reuse packaging and to accept leftover or expired material and empty containers?

### Material Substitution

#### ***Do you replace:***

- hazardous fixers and developers with less toxic or low volatile organic compounds (VOC) containing fixers and developers?
- hazardous solvents that have high VOC and high vapour pressure with less hazardous solvents?

- high VOC petroleum based inks with less hazardous vegetable oil based inks?
- fountain solutions containing isopropyl alcohol (IPA) with ones having low concentrations of IPA or no IPA?
- processing plates/films with silver free processing plates/films?
- solvent-based cleaners with detergents for general clean-ups?

### **Energy, Water & Materials Conservation**

#### ***Do you conserve energy by:***

- reducing heat to stairwells, hallways and lobbies?
- reducing thermostat settings at night, weekends, and holidays?
- installing energy efficient lighting throughout work areas?
- turn off lights and office equipment when not in use (e.g., overnight or weekends)?
- purchase products that have low energy use ratings and automatic power-save or sleep modes (e.g., Energy Star labelled products)?

#### ***Do you conserve water by:***

- repairing leaking pipes, hoses, fittings and faucets immediately?
- not allowing hoses to run continuously?
- installing water saving devices and timers on workplace taps, showers, and toilets?

#### ***Do you conserve materials by:***

- developing a colour specific ink use table to increase accuracy of ink estimates?
- develop a list of recommended press settings for each press using common paper and ink combinations?
- recording any problems with paper and ink combinations and their solutions, if known ?
- record paper, ink press and press settings on the job bags of any jobs that might be re-run in the future?

### **Process Modifications**

#### ***Do you reduce waste in the pre-press stages by:***

- employing electronic image processing?
- employing laser plate making?
- adjusting chemical replenishment rates and wash-water flow rates?
- proofing jobs before they go to the press?

#### ***Do you extend bath life by:***

- adding ammonium thiosulfate to silver-contaminated bath?
- adding acetic acid to fixing bath?
- using an acid stop bath?
- monitoring pH and temperature of fixing bath?
- reducing contamination from chemical drag-in, drag-out by adding drip boards and extending drip time between baths?

#### ***Do you reduce waste in printing & finishing stages by?***

- employing a standard ink sequence?
- applying anti-skimming spray to the ink fountains?
- monitoring pH and temperature of fountain solution?

### **Material Recovery & Waste Management**

#### ***Do you:***

- recover silver?
- reuse fixer after silver is removed?
- employ rinse-water recycling?
- collect and reuse or recycle inks?
- collect used solvents and reuse or recycle where possible?
- segregate your waste material into recyclable material, compostable material, waste and waste dangerous goods for disposal in compliance with government regulations?
- keep records of waste sources and disposal?
- set goals for source reduction ?
- reuse and recycle used paper?
- reuse and recycle plastics, cardboard, drums, other packaging materials?
- recycle film, plates, used oil, pallets, cans, containers, etc.?