

Environmentally Friendly Eco-Inks

The scope of the publishing industry's ecological footprint is not limited to paper use. Inks, too, can leave its mark on the environment. Standard printing inks often contain harmful agents that contaminate the environment and compromise human health. Using new environmentally beneficial green printing technologies and choosing to print green with ecologically sound agri-based inks are now viable options and a good way to begin alleviating the problems caused by inks.

Eco-Problem: Heavy Metals and Solvents Toxic heavy metals and solvents in inks pose the most significant environmental problems. Lead, cadmium and barium are a few of the highly toxic heavy metals found in some inks and these can easily seep into the environment, contaminating our soil and groundwater. Concentrations of heavy metals in the human body have been linked to serious neurological disorders, particularly in developing brains. Petroleum products and solvents typically consisting of alcohol or different hydrocarbons are also common ingredients used in inks. Most solvents are toxic and nearly all release volatile organic compounds (VOCs) into the atmosphere as they dry. VOCs are a well-known culprit in the problem of ozone depletion.

Non-toxic, biodegradable vegetable-based inks were in standard use prior to the 1960s, when petroleum products started becoming a major ingredient in these new "higher-performing" inks. It is now clear that many of the so-called advancements attributable to petroleum-based inks have adverse effects on the environment. Recent technological advances have not only created better performing agri-based inks, but have also developed ways to capture significant amounts of VOCs, preventing them from entering the environment.

Eco Ink Solutions

Publishers and green printers have access to more eco options than ever before and eco-inks are no exception, with a variety of choices beyond standard inks, ranging from recycled ink, non-toxic ink and soy inks to other smart agri-ink alternatives

Agri-Based Inks

While most inks are still petroleum-based, some ink manufacturers now substitute renewable and biodegradable resources (such as soy, linseed, and corn oils) for most or all of the petroleum. Vegetable oil replacement ink meets the same specifications as petroleum-based ink, and it does not release a significant volume of VOCs into the air when it dries. Agri-based inks are produced without toxins and biodegrade, effectively eliminating environmental, health and safety hazards.

VOC Capturing Technology

When alternative materials such as agri-inks are not adequate or available, facilities can reduce emissions through "control and capture technology." Using ventilation systems, emissions are guided to devices which capture the VOCs. Captured emissions are either destroyed or re-used on similar applications. Ask your printer about agri-based inks made with renewable oils, recycled inks, and inks that are heavy metal-free.

Using Eco-friendly Inks is Simple:

- Work with printers to find a line of vegetable or soy-based inks that suit a publication's needs. Most importantly, be sure that inks use a renewable resource base. If for some reason this is an unavailable option, stay true to sustainability principles and work to find recycled inks.
- Always use inks free of heavy metals.
- Eliminating VOC-releasing products is an important step toward greening your ink.

Other Eco-Ink Resources

- Conservatree
- Environmental Defense