



Services Available to the Custom Coatings and Printing Industries

Coatings and printing operations are subject to numerous regulations, both federal and provincial, with regards to air emissions, pollutant reporting, toxics reduction, and waste removal. Failure to comply with these regulations can result in financial penalties (fines), or in a worst case scenario, even plant shutdowns. This makes it critical to ensure that your facility is up to date with these numerous, changing, regulations. Spectrum Environmental is available to help your facility with many of these regulatory requirements and obligations.

What are my facility's regulatory obligations?

Depending on the specifics for your facility, it is likely that you may have some or all of the following obligations:

- **NPRI Reporting:** if your facility uses or emits quantities of pollutants (such as VOCs, heavy metal based pigments, chromate pigments, and various etching solution components) over threshold levels, you are obligated to report those values to Environment Canada's NPRI inventory via the OWNERS website. Reporting must be done annually.
- **Certificates of Approval (Air):** The Ontario Environmental Protection Act requires that any thing that emits contaminants (such as a baking oven or paint spray booth) to the natural environment be approved prior to installation and operation. If an approval was not obtained at that time, then a retroactive approval may be necessary. In addition, operational changes, such as paint reformulation or equipment replacement usually require an amendment to a facility's current Certificate.
- **Toxics Accounting and Reduction Plans:** Ontario's new Toxics Reduction Act and associated regulations require that manufacturing facilities (including NAICS codes 31, 32, and 33) keep track of the use, creation, transformation, and emission of various substances if threshold values are met. Toxics accounting quantifications will be reportable online, similar to the NPRI. In addition, facilities that meet thresholds are obliged to prepare a Toxics Reduction Plan that analyzes alternatives and methods to reduce the use or creation of the toxic substance. This plan is required even if the facility does not intend to implement any reduction measures. Toxics accounting is required to be done on an annual basis. A Toxics reduction plan must be periodically reviewed and updated once prepared (approximately every 5 years). Progress reports and plan summaries are required to be submitted to the MOE on a periodic basis.

The above is a list of common regulatory requirements for coating and printing operations and is not exhaustive.

What is involved in carrying out the above?

- **NPRI Reporting:** The NPRI requires that you assess your usage, emission, and disposal of certain substances on an annual basis. Quantifying usage usually involves looking at purchasing records for raw materials (such as paints and process chemicals), and their compositions (usually found in MSDS sheets). Processes at your facility must be assessed in order to develop the appropriate methods to quantify emissions and disposals. Finally, the results are reported online to Environment Canada. The substance use thresholds that determine the requirement to report are published annually in the Canada Gazette.
- **Certificates of Approval (Air):** To obtain a Certificate of Approval, or an amendment to a Certificate of Approval, an application must be submitted to the Ontario Ministry of the Environment. This application must include administrative documentation, and be prepared in the proper format. In addition, the application must include a detailed technical report (Emissions Summary and Dispersion Modelling (ESDM) report), which demonstrates that the facility is in compliance with Ontario air quality standards, and will not cause an adverse affect. This report is required to include the results of modelling the emissions with regulatory prescribed computer programs. In addition, some facilities might also require an acoustic assessment, depending on the proximity to noise sensitive areas (such as residences, hotels, and hospitals).
- **Toxics Accounting and Reduction Plans:** Toxics Accounting requires similar quantifications as the NPRI. However; Toxics Accounting must be done using the 'Best Available' methods, and require a facility to consider source testing and monitoring if possible. Detailed process flow diagrams must be prepared to support the accounting methods. A Toxics Reduction Plan requires a detailed technical and economic analysis of seven or more possible methods to reduce the use or creation of each toxic substance, and is based on Toxics accounting. The preparation of the plan will likely require moderate to heavy involvement of your staff, in addition to assistance from outside consultants.

What can Spectrum Environmental do for you?

The senior staff at Spectrum Environmental have been involved in many aspects of the coatings and printing industries for many years and so have a good knowledge of the materials (resins, solvents and pigments) as well as the processes (metal and surface preparation, spraying, heat treatment) used in coatings and printing operations, so the Company is familiar with the background to regulatory obligations that apply to facilities. Our familiarity with industry processes and materials allows us to work efficiently with your facility; we know exactly what to look for as soon as we visit your plant, so that we will get an understanding of your company's particular requirements within a very short time – there will be virtually no learning curve involved.

We are available to help your facility prepare required documentation (such as a Certificate of Approval Application, or NPRI submission), as well as act as a liason between your facility and regulatory agencies.

If you have any questions about the above, or would like more information, please feel free to contact us by phone at 905-842-6411, by e-mail at spectrum@chaltis.ca, or by leaving a comment on our website, <http://www.spectrumenvironmental.ca>.

We look forward to hearing from you.