



Designated Substances and Hazardous Materials

Did you know that there are 11 Designated Substances that the Ontario *Occupational Health and Safety Act* has determined to be toxic? The Act has 11 separate Regulations that have been passed, each describing the amount of the substance that workers can be exposed to and different ways to control and measure the substance in the workplace. It is the responsibility of building owners and employers to properly identify the Designated Substances that are present at their site. This information also needs to be provided to all bidders at the tendering stage as a requirement of the Ontario *Occupational Health and Safety Act*. Following is a list of the 11 Designated Substances and their corresponding regulations:

Acrylonitrile	O. Reg. 835
Arsenic	O. Reg. 836
Asbestos	O. Reg. 278
Benzene	O. Reg. 839
Coke Oven Emissions	O. Reg. 840
Ethylene Oxide	O. Reg. 841
Isocyanates	O. Reg. 842
Lead	O. Reg. 843
Mercury	O. Reg. 844
Silica	O. Reg. 845
Vinyl Chloride	O. Reg. 846



However, only four of these Designated Substances are commonly encountered on a project site, including asbestos, lead, mercury and silica.

Designated Substance Surveys (DSS)



Before a construction or demolition project can begin, it is the responsibility of the property owner to properly identify the Designated Substances on the project site and provide contractors with a Designated Substance Report prior to initiating any work. This Report is required by the *Occupational Health & Safety Act* in and the Workplace Safety and Insurance Board. A Designated Substance Survey and subsequent Report will properly identify the type, location and concentration of any Designated Substances on-site so that applicable measures can be taken to ensure the safety of those working on the site and the general public.

Designated Substance Surveys will include a visual inspection of the property to determine any Designated Substances present within the building materials or equipment on-site. The type, characteristics and condition of these building materials are also assessed. During this inspection, samples of the Designated Substances will be collected and submitted to a laboratory facility to be analysed. In addition to the Designated Substances, most Surveys will also include inspections for other Hazardous Materials.



Hazardous Materials

In addition to the Designated Substances, there are several other regulated or controlled substances which are often assessed during a Designated Substance Survey. These substances usually require special consideration due to legislation and waste disposal requirements. In addition to the Designated Substances, most Surveys will also include inspections and assessments for:

Mould

Polychlorinated Biphenyls (PCBs)

Ozone-Depleting Substances (ODSs)

Radon

Electromagnetic Radiation

Urea Formaldehyde Foam Insulation (UFFI)



By properly identifying the Hazardous Materials located on a project site, work procedures and specific handling instructions can be determined to minimize the health and environmental risks of these materials.



How Paracel Can Help

Paracel Laboratories Ltd. routinely provides analysis for the most common Designated Substances and Hazardous Materials and can assist property owners, general contractors and consultants in the mandatory requirements of all 11 Designated Substances. With Paracel's industry leading 4 day standard turn around time and the ability to achieve same day rush analysis, our clients are able to quickly identify problems and risks and compile their Designated Substance Surveys with minimal disruption to their project. Whether you are a general contractor, property owner or consultant, Paracel Laboratories Ltd. is able to provide the analytic expertise you'll need to properly fulfill your obligations to identify Designated Substances and Hazardous Materials on your next project.

The Service Team at Paracel is fully committed to continuous improvement and providing complete solutions to our clients in respect to their analytical requirements. If you have any questions in regards to this document or your sampling program, please don't hesitate to contact Paracel's Service Team at 1-800-749-1947 or by email at paracel@paracellabs.com.