

Levelton has provided emission testing and ambient air quality monitoring services to industry and government agencies for over 30 years. We have the expertise and equipment to measure pollutant emissions from stack and fugitive sources and to test ambient pollutant concentrations. Clients typically require these types of services to comply with air emission permits, to provide data for trouble-shooting or design purposes, or to assess baseline conditions as part of an environmental impact assessment for a proposed new facility.

Emission Testing Methods

Levelton has extensive experience with Canadian and US emission testing methods for air pollutants, including:

- Particulate matter – total, PM₁₀, PM_{2.5};
- Heavy metals;
- Fixed gases such as SO_x, NO_x, CO, CO₂, HCl, HF, Cl₂, TRS, H₂S, etc.;
- Semi-volatile organic compounds including dioxins, furans, PAHs, PCBs, etc.; and
- Volatile organic compounds such as benzene, toluene, xylenes, ethylbenzene, chlorobenzene, vinyl chloride, acetates, etc.

Our staff routinely conducts emission surveys for permit compliance, or for engineering evaluations. We have experience with most types of emission sources and industrial sectors, and the test methods that apply to each, such as pulp and paper mills, wood products manufacturing plants, petroleum refineries, chemical plants, power plants, foundries, mines and smelters, food processing plants, service stations, bulk plants, and asphalt plants.

Hexavalent Chromium Testing Services

Any facility that uses a solution containing a hexavalent chromium compound for chromium electroplating, or chromium anodizing, must follow the Canadian Environmental Protection Act dated June 4, 2009: *Chromium Electroplating, Chromium Anodizing and Reverse Etching Regulations*.

Levelton is fully equipped to test those facilities in accordance with sections 4-6; facilities that use a point source as a control method for hexavalent chromium.

Using approved US EPA method 306/CARB 306 "Determination of Chromium Emissions from Decorative and Hard Chromium Electroplating and Chromium Anodizing Operations – Isokinetic Method".





LEVELTON

Emission Surveys

Services are available to aid our clients with their regular or occasional testing and consulting needs, such as:

- Stack testing for permit compliance;
- Opacity reader training and certification;
- Size distribution of particulate emissions – both in stack and ambient;
- Petroleum or chemical product losses during loading of storage tanks;
- CEMS certification, RATA testing, quality control and quality assurance manuals and annual audits;
- Toxic, explosive and oxygen-deficient atmospheres;
- LDAR programs at refineries and petrochemical facilities – leak surveys, data management and emission inventories;
- Monitoring of workplace pollutants and noise in accordance with WCB methods; and
- Ambient air quality monitoring and reporting.

Levelton can also develop customized emission testing programs to suit specific air pollution or process problems.

Testing and Consulting Services

With our testing, pollution control and power engineering expertise, Levelton can provide you with a complete service package such as:

- Emission surveys for permit compliance, engineering design and issue resolution;
- Permit and license applications;
- Ambient air quality testing programs, data management and reporting;
- Baseline studies for environmental impact assessments;
- Pollution control equipment selection, assessment, troubleshooting and optimization;
- Certification of continuous emission analyzers;
- Special studies – emission characterization, test burns, pollution equipment performance testing, power plant efficiency tests, equipment;
- acceptance testing to ASME, ANSI and other test standards, etc.; and
- NPRI emission reporting.

Levelton Consultants Ltd.

#150 – 12791 Clarke Place, Richmond, BC V6V 2H9

Tel: 604.278.1411 Fax: 604.278.1042

Email: info@levelton.com