

CITY OF HAMILTON

PUBLIC WORKS DEPARTMENT (HAMILTON WATER DIVISION – ENVIRONMENTAL LABORATORY SERVICES - LOCATION – 700 WOODWARD AVE.)

LABORATORY TECHNOLOGIST - CUPE 5167

SUMMARY OF DUTIES

Reporting to the Supervisor Organic Chemistry, Supervisor Trace Metals, or Supervisor Inorganic Chemistry, the Laboratory Technologist trains staff, performs routine and non-routine chemical testing on environmental samples including water, wastewater, sludge, and biosolids samples using the appropriate technical equipment and instruments. The Lab Technologist performs QA/QC duties associated with an ISO17025 accredited MOE licensed environmental laboratory and contributes to troubleshooting/recording of trends, nonconformances, corrective actions and opportunities for improvement. The Lab Technologist coordinates work with other staff.

GENERAL DUTIES

Perform routine and non-routine chemical testing on environmental samples including water, wastewater, industrial waste, landfill ponds, leachates, sludge, and biosolids as per standard operating procedures.

Operate, calibrate and maintain laboratory instrumentation such as GC/MS, GC/MS/MS, ICP, ICP/MS, segmented flow analyzers, IC, and other advanced instrumentation for the measurement of organic and inorganic analytes.

Ensure adherence to the Ontario Drinking Water Standards (ODWS) in regard to reporting of drinking water exceedances.

Perform liquid-liquid and solid phase extraction and clean-up of samples for the determination of various organic contaminants. Perform digestion of samples for the determination of inorganic and metal analytes.

Coordinate work with other staff.

Analyze, review and document test results in the Laboratory Information Management System (LIMS).

Maintain updated documentation and follow all technical, administrative, and operational protocols to comply with the requirements of accredited and MOE licensed laboratories.

Perform analyses on evidentiary samples. Testify in court.

Train new staff on laboratory analyses, procedures and instrumentation. Provide technical support to technicians including analytical technique and troubleshooting instruments/methodologies.

Troubleshoot laboratory instrumentation, maintain updated records of instrument performance. Liaise with instrument vendor representatives.

Assist in the development or update of methodologies.

Perform quality control activities for analytical testing such as method verification, accuracy, precision, detection limits, and control charts.

Input, retrieve, and evaluate analytical data from instruments for the purpose of monitoring and compliance. Prepare analytical technical reports.

Prepare reagents and standard solutions.

Review inventory of chemicals and laboratory supplies and request purchase of the items. Research options for purchasing equipment and supplies, obtain quotes, complete procurement as per City of Hamilton Procurement Policy Bylaw.

Take part in internal and external audits and inspections to maintain lab licensing and accreditation.

Receive and answer technical enquiries from public, staff, other departments and outside agencies.

Perform all necessary tasks to maintain a tidy, safe work environment.

Perform other duties as assigned which are directly related to the major responsibilities of the job.

Work in accordance with the provisions of applicable Health and Safety legislation and all City of Hamilton corporate and departmental policies and procedures related to Occupational Health and Safety.

QUALIFICATIONS

1. Demonstrated proven knowledge of the theories and practices of Chemistry usually acquired by the successful completion of a university degree or three-year community college diploma in chemistry or related field or the equivalent combination of relevant education and work experience.
2. Previous demonstrated experience performing sample preparation and analyses for organic, inorganic and metals analytes and operating advanced laboratory instrumentation for environmental analyses.
3. Demonstrated experience working in an ISO17025 accredited and MOE licensed laboratory.
4. Experience in completing projects independently from the inception of ideas to final implementation and evaluation, is an asset.
5. Excellent knowledge of Excel spreadsheets. Proven demonstrated knowledge of Word, laboratory instrument software, and LIMS.
6. Must have good verbal and written communication skills, initiative, organization and ability to work in a team environment.
7. Must have excellent attention to detail with an aptitude for figures. Possess the ability to receive and interpret information where accuracy and understanding is important. Good judgement and confidentiality are required.
8. Demonstrated ability to manage a high volume of tasks and duties in an efficient manner in a deadline-oriented environment. Personal self-management skills to maintain professionalism and set priorities in a fast-paced environment.

NOTE:

As a condition of employment, the successful applicant(s) will be required to obtain a satisfactory Criminal Record & Judicial Matters Check, at their own expense, prior to beginning work in this position.

THE INCUMBENT SHALL COMPLY WITH ALL HEALTH AND SAFETY POLICIES AND PRACTICES FOR THIS POSITION AND THE WORKPLACE.
