

**Job Class Profile: Industrial Hygienist I****Pay Level: CG-42 Point Band: 994-1037**

Factor	Knowledge	Interpersonal Skills	Physical Effort	Concentration	Complexity	Accountability & Decision Making	Impact	Development and Leadership	Environmental Working Conditions	Total Points
Rating	7	6	3	6	7	6	6	1	5	
Points	327	100	19	29	210	130	124	21	54	1014

**JOB SUMMARY**

The Industrial Hygienist I participates in the development, design, administration, direction and evaluation of occupational hygiene programs established to provide environmental conditions at industrial properties to minimize the exposure of workers to contaminants and stresses which might lead to occupational disease or disability.

**Key and Periodic Activities:**

- Participates in the design, administration, direction and evaluation of occupational hygiene programs established to prevent occupational diseases amongst workers at mines as well as other industrial properties and workplaces.
- Implements occupational hygiene programs designed to prevent occupational diseases. Inspects industrial operations, machinery and equipment to determine the degree of compliance with health and safety standards and ensures appropriate corrective action is taken. Investigates, evaluates and analyzes employee exposure to chemical, physical and biological agents and any other health hazards found in the workplace as well as illnesses and fatalities. Recommends preventative measures and course of action concerning safety violations and issues directives to ensure implementation of such action.
- Implements programs of occupational hygiene; examines and determines the need for, or effectiveness of control measures (administrative, engineering, ventilation and personal protective equipment); reviews procedures designed to control contaminants and where necessary recommends changes required to make them effective.
- Interprets work environment monitoring results in consultation with the Mines or Occupational Health and Safety Inspector and management staff to determine the applicability of standards; the ability of contaminants to impair worker's health; assess the nature of the damage of those affected; and may be required to present specific recommendations to management and labour and governmental health agencies.
- Prepares codes, rules, regulations and procedures designed to obtain healthful working conditions in consultation with the Chief Occupational Medical Officer and management; presents expert testimony before courts of law, hearings, boards and regulatory agencies covering all matters pertaining to industrial hygiene.
- Conducts educational programs for workers and the general public in industrial hygiene; assesses the adequacy of ventilation programs in underground mines.
- Designs and initiates epidemiologic studies to discover and assess the presence or absence of work environment contaminants and their effects on workers.

**Key and Periodic Activities:**

- Responds to enquiries from employers, unions, governments, professional firms (law, engineering and medical), health and safety agencies, consultants and the public on occupational health related matters.
- Keeps abreast of current research and development in the field of industrial hygiene by maintaining professional certification; taking professional development courses; attending conferences; reviewing and monitoring current literature; participating as a member of departmental/provincial/federal committees, associations and task forces and networking through research and personal contacts.
- May consult with various organizations and professionals on occupational health issues and policies.

**SKILL****Knowledge****General and Specific Knowledge:**

- Known and emerging industrial occupational health hazards
- Engineering and other types of control options to reduce work exposure
- Occupational exposure limits
- Knowledge of industrial processes within the province
- Applicable legislation and regulations

**Formal Education and/or Certification(s):**

- Minimum: Masters degree in Occupational Hygiene or equivalent and licensure as a Certified Industrial Hygienist/Registered Occupational Hygienist or Canadian Registered Safety Professional.

**Years of Experience:**

- Minimum: 3 – 4 years

**Competencies:**

Ability to apply established techniques; coordinate a range of related work or project activities; assist in developing programs, methods, procedures and initiatives and provide advice. Analytical, written and verbal communication skills.

**Interpersonal Skills**

- A range of interpersonal skills such as listening, asking questions, providing routine and specialized information, promoting services, instructing, gaining the cooperation of others, dealing with upset and angry people, resolving disputes (contentious and highly sensitive hygiene issues with management and labour), providing expert advice, conducting formal interviews, facilitating meetings and making formal presentations.
- Communication typically occurs with employees/peers/supervisor, clients and other government representatives, with professional associations/advisors, private and public sector employers/employees and OHS Committee representatives.
- Most significant contacts are: Supervisor (to discuss working environment to assist with evaluation/assessment of work place health hazards); Employers (to discuss occupational

health hazards and protection of worker health); and Occupational Health & Safety Inspectors/Management (to discuss environmental monitoring results and applicability of standards).

## EFFORT

### Physical Effort

- The demands of the job occasionally result in considerable fatigue, requiring periods of rest.
- Occasionally required to lift or move objects 10 - 25 lbs such as air sampling pumps, noise dosimeters, heat stress monitors, bioaerosol samplers and gas monitors when conducting inspections. During these inspections, there may be climbing and walking in confined areas or on narrow catwalks around, over and between large machines and industrial processes.
- Using the above noted equipment requires very controlled movement and maintaining physical balance.
- The use of fine finger/precision work to write briefing notes, detailed technical and investigative reports and other correspondence is required.

### Concentration

- **Visual** concentration is required when conducting inspections, operating various types of equipment and using a computer to write reports.
- **Auditory** demands may require hearing protection as some work environments are noisy and communication is sometimes difficult.
- **Time pressures and deadlines** are experienced when information is requested by management.
- **Higher than normal level of attentiveness for the health and safety of others** is required when conducting core activities and when working at unfamiliar work sites.
- Using sampling equipment in the field, taking notes on observations and using a computer requires **eye/hand coordination**.
- **Exact results and precision** is required when conducting inspections and assessing the adequacy of ventilation programs in underground mines.

### Complexity

- Tasks and activities range from repetitive/well-defined to different/unrelated and require the use of a broad range of skills and a diversity of knowledge.
- Activities such as assisting with the planning and development of occupational hygiene programs and overseeing their design, implementation and evaluation have strategic and policy significance.
- Required to keep abreast of trends and developments to ensure current knowledge of known and emerging occupational health hazards in all industry sectors. Work includes evaluation of occupational hygiene programs established to prevent occupational diseases.
- Some challenges/problems/issues can be addressed by following procedures or guidelines, however, many are unique problems that must be defined and practical solutions found or where creative problem definition, analysis and complex solution development is required.
- Issues likely to arise result from interpretation of work in environmental monitoring. Results are reviewed in consultation with the Mines or Occupational Health and Safety Inspector, and

management staff to determine the applicability of standards; the ability of contaminants to impair worker's health; assess the nature of the damage of those affected; and may be required to present specific recommendations to management and labour and governmental health agencies.

- Reference material available includes legislation and regulations; standards, (i.e. Canadian Standards Association), guidelines, manuals, research and information from other jurisdictions.

## RESPONSIBILITY

### Accountability and Decision-Making

- Work tasks and activities are moderately prescribed or controlled.
- Exercises considerable independent judgement, particularly in work site situations where the health and lives of workers may be placed in imminent danger. Have full authority to issue Stop Work Orders where there is imminent danger to a worker's health or safety. Directives/Orders can also be issued to employers that are in non-compliance with legislation.
- Assists in the planning and development of occupational hygiene programs.
- Policy changes, significant commitments on behalf of the division, prosecution for violation of legislation, allocation of time for committee and task force activities, purchasing of equipment and publications, and the performance of overtime requires supervisory approval.
- Acts independently and must exercise a high degree of independent discretion and judgement when interpreting directions and applying guidelines during inspections and investigations. In making judgements must adhere to the Code of Practice of the Professional Practice of Industrial Hygiene.

### Impact

- Impacts are felt internally within the immediate work area/department/government as well as externally with employers and employees in the public and private sector. Resources affected include equipment (may be taken out of service, reducing a businesses' operation and productivity); processes and systems, information (reports issued are available to the employer's OHS Committee for review); finances, facilities, material resources, human resources (employer's may require additional employees to meet requirements of the legislation); health and safety (of employees within the public and private sector), corporate image (employer may be identified in the media, especially if there is a serious injury or fatality) and the environment (indirectly, i.e. incinerator shut down as a result of an investigation).
- The consequences of a mistake or error can have a significant impact on the lives, health and well-being of people. The precautionary principle governs the practice of a certified industrial hygienist. Thus, the consequences of an error may result in some financial cost to an employer but not the health of a worker.

### Development and Leadership of Others

- There is no supervision of staff.
- May provide on-the-job advice/guidance to staff and new employees.

## WORKING CONDITIONS

### Environmental Working Conditions

- There is a requirement to anticipate potential hazards that may be encountered at worksites and wear appropriate personal protective equipment and follow safe work practices and procedures.
- There is limited likelihood for injuries or illnesses resulting from hazards given that all health and safety regulations are followed.
- Tasks and activities are carried out in a variety of work places. This may include indoor environments such as offices, warehouses, processing plants, schools, factories, industrial work sites, hospitals, etc. Outdoor environments may be visited at any time of year and include refineries, shipyards, industrial construction sites and mine sites.
- Occasionally there is potential exposure to unusual/distracting noise, dirt, dust, glare, fumes, limited ventilation and lighting, vibration, hazardous chemicals, toxic or poisonous substances, bodily fluids and waste, infectious diseases, odours, dangerous heights or depths, wet or slippery surfaces, electrical shocks, lack of privacy, isolation, awkward or confining workspaces, temperatures extremes, radiation, physical dangers or threats, sharp objects, heavy machinery, adverse weather conditions and travel.