

Job Class Profile: Senior Environmental Scientist**Pay Level: CG-45 Point Band: 1136-1189**

Factor	Knowledge	Interpersonal Skills	Physical Effort	Concentration	Complexity	Accountability & Decision Making	Impact	Development and Leadership	Environmental Working Conditions	Total Points
Rating	8	7	2	5	8	6	6	4	3	
Points	373	117	13	24	240	130	124	86	32	1139

JOB SUMMARY

The Senior Environmental Scientist performs responsible professional scientific work relating to protection of the environment by assisting with policy development and implementing legislation. Work involves overseeing the day-to-day operations and administering provisions of relevant legislation. Oversees the work of other professional scientists to ensure thorough and timely environmental reviews, evaluates work assignments for technical and scientific adequacy of environmental assessment studies and ensures adherence to environmental assessment legislation and departmental policies.

Key and Periodic Activities

- Leads the development and implementation of regulations, policies, standards, guidelines and agreements relative to protection of the environment.
- Oversees the work of staff to ensure thoroughness, efficiency, adequacy and accuracy.
- Provides policy direction to staff and policy advice to senior management and executive staff by preparing discussion documents, briefing notes, memos and data compilation and interpretation.
- Supervises and monitors the work of environmental scientists responsible for providing technical guidance and support to industry and other government departments on concerns and issues dealing with a variety of environmental pollution issues.
- Ensures the protection of natural resources from the effects of work performed by a variety of industries by preparing and reviewing certificates of approval, environmental effects programs, chemical toxicity, environmental assessments including environmental impact statements and environmental protection plans.
- Reviews federal legislation and provides comments on any potential impact on the environment.
- Oversees the administration and enforcement of applicable environmental planning and legislation and reviews work conducted in relation to investigation of potential violations of various acts and regulations. Reviews reports on findings that contain recommendations for appropriate course of action.
- Directs environmental assessments of proposed activities, projects, works or plans such as resource developments and construction projects and programs; reviews project proposals relative to established criteria and makes recommendations on the need for and terms of

Key and Periodic Activities

- reference of formal environmental assessment studies.
- Reviews a variety of documents and reports relating to issuance of Certificate of Approvals, quality reports and development plans.
- Coordinates technical activities and administers a number of Canada-Newfoundland Monitoring Agreements.
- Prepares a variety of annual reports.
- Participates in the Canadian Association of Laboratory Accreditation audits and training upgrades.
- Participates in a variety of Federal/Provincial Working Groups.
- Represents the department on a variety of committees.

SKILL

Knowledge

General and Specific Knowledge:

- Requires specific technical knowledge in such fields as hydrology, hydraulics, engineering design, modeling, statistical analysis, environmental acts and regulations and environmental site assessment protocols
- Current knowledge of trends and new developments and research in the field
- Specific knowledge relating to the development and design of new policies and programs

Formal Education and/or Certification(s):

- Minimum: Masters Degree – Environmental Science or related discipline

Years of Experience:

- Minimum: 6 - 7 years

Competencies:

- Strong research skills
- Written and verbal communications skills
- Analytical and assessment skills

Interpersonal Skills

- A range of interpersonal skills are used such as listening, asking questions, providing routine and specialized information, negotiating contracts and/or agreements (establishing partnerships with industry), mentoring/coaching, conducting formal interviews, instructing/teaching/training, facilitating meetings, making formal presentations, gaining the cooperation of others and providing expert advice to others.
- Interaction typically occurs with employees, peers, supervisor/manager, other municipal/provincial/federal representatives, internal departmental executives and clients or the general public and relate to development proposals; providing technical advice and guidance to industry representatives; and discussing policy, guidelines and legislative changes.
- Most significant contacts are with employees supervised (to provide supervision and guidance to ensure technical projects are completed successfully); Manager/Clients/Industry

Partners (to ensure continued open communication); Federal Government counterparts (to ensure open communication from an administrative and technical standpoint).

EFFORT

Physical Effort

- The demands of the job do not result in considerable fatigue, requiring periods of rest.
- Occasionally required to physically handle, lift or move objects weighing less than 10lbs.
- Typically sits at a computer to perform analysis of data and write reports for extended periods of time.
- Occasionally required to conduct site visits, which requires driving, walking and climbing.
- Fine finger and precision work occurs on a regular basis when performing data analysis and report writing and reviewing environmental monitoring data.
- As work involves travel throughout the province, driving is also a regular requirement.
- Occasionally required to use hand tools that require accurate control and steadiness, such as when using and/or calibrating scientific and laboratory instruments.

Concentration

- **Visual concentration** includes staring at a computer screen to read, analyze and manipulate data. When conducting site visits, there is a requirement to be cognizant of your surroundings to ensure safety.
- **Auditory concentration** is exercised when discussing issues with staff, facilitating meetings or conference calls and when visiting sites.
- **Higher than normal level of attentiveness** is required when conducting site visits, travelling by helicopter and when reviewing project proposals.
- **Time pressures and deadlines** are experienced when requests are received from executive personnel to provide particular information on a subject matter; committee level work; and reviewing documents as part of responsibility for program lead.
- **Exact results and precision** are required when analyzing data.

Complexity

- Tasks are typically different/unrelated and require the use of a broad range of skills and a diversity of knowledge. Activities range from supervising other professional staff to negotiating Memorandums of Agreement and monitoring/implementing upon approval.
- Certain challenges/problems/issues require a site visit to define the situation and make a determination of type of solution required. Many of these challenges are unique resulting in limited opportunity for standardized solutions and requiring creative problem definition and solution development. This can range from water quality issues, land uses and/or hazardous waste issues. Such an example is exceeding levels of metals being released from an industrial site which has to be remedied immediately to avoid as much environmental damage as possible.
- Required to keep abreast of trends and developments in environmental science, such as new technologies, systems and assessment techniques.
- Reference material available includes legislation and regulations, guidelines, advice from

colleagues and information from other jurisdictions.

RESPONSIBILITY

Accountability and Decision-Making

- Can implement Certified and Accredited laboratory policy and requirements for industries as a result of policy; design monitoring programs that are included in industrial certificates of approval. Discretion is exercised to travel to industrial sites within the province. Recommends approval for employee leave and travel and provides work planning for staff.
- May need formal approval for major equipment purchases and travel.
- Applying guidelines in the development of monitoring programs to ensure there are no adverse effects on the environment requires discretion and judgement.
- Act independently and must exercise a high degree of discretion and judgement when determining if monitoring results are of acceptable quality for the purposes of legislative compliance.

Impact

- Impacts are felt internally within the immediate work area/department/government as well as externally with clients/general public.
- Resources affected mainly include processes and systems (environmental assessment reviews, certificate of approval), finances (to industry if non-compliance determined through audit), facilities (costs to industry for non-compliance), health & safety (contaminants being released into the environment), corporate image (resulting from liaising with other government and industry officials) and the environment (protection).
- The consequences of a mistake or error can impact the public as it could cause exposure to hazardous chemicals or other contaminants entering the environment.
- The risk or consequences of an error can have a significant impact on the environment which can affect habitats, organisms, watersheds and humans in severe cases. Positive impacts include the confidence of the public knowing that a variety of monitoring and assessments are conducted to ensure environmental standards are being upheld.

Development and Leadership of Others

- Typically responsible for direct and ongoing bargaining unit supervisory activities for a small size work group of employees (1 to 4 employees).
- Have development and leadership responsibilities such as providing advice, guidance, direction, feedback, orientation, on-the-job training, acting as a technical mentor, building morale and employee relations, delegating tasks, project lead and organizing and coordinating the work of others.

WORKING CONDITIONS

Environmental Working Conditions

- Safety equipment is not typically required; however, work occasionally requires industrial site visits or working in and around water where it is necessary to wear steel-toe boots, hard hat, safety vest, safety glasses and/or personal flotation devices, chest waders, throw bags,

ice-picks, etc. To access some water sources, sometimes requires walking on woods roads with rough terrain.

- There is limited likelihood for injuries or illnesses resulting from hazards given that all safety precautions are adhered to.
- Travel is occasionally required to conduct site visits to assess development proposals.
- Occasionally there is exposure to dirt, dust, filth or garbage, glare, fumes, limited ventilation, limited lighting, vibration, hazardous chemicals, toxic or poisonous substances, odours, dangerous heights or depths, adverse weather conditions, working on wet or slippery surfaces, sharp objects, heavy machinery, awkward or confining spaces.