



**IDENTIFICATION**

<b>Department</b>	<b>Position Title</b>	
Infrastructure	Environmental Analyst – Mackenzie Valley Highway	
<b>Position Number</b>	<b>Community</b>	<b>Division/Region</b>
33-15370	Yellowknife	Strategic Infrastructure/HQ

**PURPOSE OF THE POSITION**

The Environmental Analyst – Mackenzie Valley Highway contributes to the high quality, efficient and timely environmental design, assessment, regulatory review and permitting processes, and land use, conservation planning or other initiatives that may have implications for the Government of the Northwest Territories’ Mackenzie Valley Highway Project.

**SCOPE**

The Environmental Analyst – Mackenzie Valley Highway (Analyst) is located in Yellowknife and reports to the Manager, Mackenzie Valley Highway (MVH) Environmental Affairs.

The mandate of the Department of Infrastructure (Department) is to provide services to the Government of the Northwest Territories (GNWT) with respect to the planning, design, construction, acquisition, operation and maintenance of government infrastructure and to promote the development and increased use of energy efficient technologies. This mandate also includes the provision of regulatory safety services to the public.

The Department is highly decentralized in the delivery of its programs and services and is responsible for territory-wide government programs such as the operation and maintenance of public buildings and transportation infrastructure and systems, project management, facilities planning, design and technical support services, environmental assessment and remediation, property management, procurement shared services, information technology, information management, disposal of surplus property and goods motor vehicle and mechanical/electrical regulatory services and fleet management.

The Department is also responsible for programming aimed at increasing the use of domestic energy resources and reducing energy costs in the Northwest Territories (NWT), delivering renewable energy solutions, providing energy supply services to non-market communities, and leading efforts in energy conservation and efficiency.

On behalf of the GNWT, the Department also carries the responsibility for strategic planning for the Government of the Northwest Territories (GNWT's) long term investment in the development of public transportation and energy production and distribution systems for the NWT, as well as the continuity of marine transportation services for the provision of fuel and dry goods to northern destinations.

The MVH extends from Wrigley to the Arctic Ocean at Tuktoyaktuk. The next major MVH construction project includes a proposed \$700 million highway from Wrigley in the Dehcho Region to Norman Wells in the Sahtu Region. Development of this portion of the MVH will occur in six phases, including construction of a 465 metre (m) bridge over the Great Bear River; construction of a 15 kilometre (km) all-weather access road from Wrigley north to Mount Gaudet; construction of a 60 km all-weather road from Canyon Creek south to Tulita; construction of a 144 km all-weather road from Tulita south to the Sahtu/Dehcho boundary; construction of an 88 km all-weather road from the Sahtu/Dehcho boundary south to the Mount Gaudet access road; and the environmental planning and engineering studies to support this work. Funding is also available for the reconstruction of several major bridges along the MVH including Oscar Creek and Hodgson Creek.

The Analyst ensures that the MVH is planned, designed and pre-engineered in a manner that is consistent with federal and territorial environmental management legislation, GNWT strategic policy and plans, land use plans, Indigenous land claims, resources and self-government agreements, and broader environmental initiatives such as conservation network planning, biodiversity initiatives, federal and territorial species at risk initiatives, and climate change adaptation and mitigation strategies.

The Analyst will be responsible for preparing, or overseeing the preparation of Project Description Reports (PDRs) and Developer's Assessment Reports (DARs) for the environmental assessment and review of the MVH, or components of it. This will include leading research for the evaluation of potential environmental and socio-economic impacts of the MVH and developing potential mitigation measures for those impacts. The Analyst is responsible for the management of contracts and projects required to develop the PDRs and/or DARs for the MVH.

The Analyst implements Indigenous consultation and engagement strategies to support successful effective environmental review and regulatory/permitting processes for the MVH.

The Analyst works with other divisions of the Department, territorial and federal government colleagues, and the public, including communities and third parties. The incumbent exchanges information and expertise, collaborates with others, and participates in task teams.

The Analyst must establish and maintain key internal and external relationships including the staff within the Division, Regional Offices, the Transportation and Design and Technical Services Divisions, and other GNWT Departments. Key external relationships include representatives of Indigenous governments and organizations, regulatory boards and agencies, community governments, and industry stakeholders.

The Analyst will be the lead on technical discussions and have authority to make changes at technical level and makes recommendations to the Manager on matters that may have significant implications.

The Analyst supervises contract staff, students and interns, as required.

## **RESPONSIBILITIES**

### **1. Develop and provide recommendations to the Manager, MVH Environmental Affairs, Departmental divisions and third parties on measures to minimize and mitigate social and environmental impacts of the construction and operation of the MVH.**

- Researches, reviews, summarizes and makes available to engineers, project officers, regional staff, colleagues in other GNWT Departments and third parties, environmental mitigation strategies and solutions appropriate to the NWT.
- Assesses current departmental design, construction and operating practices with a view toward environmental protection.
- Assists the Project Manager and engineering staff from the Transportation and Design and Technical Services Divisions to develop environmental design solutions and mitigation measures for the design, pre-engineering, construction and operation of the MVH.
- Develops and implements environmental monitoring programs for road construction, streams/river crossings and other infrastructure developments.
- Contributes to the development, management and evaluation of compensation schemes for habitat loss.
- Acts as a facilitator between divisions and regulatory agencies to resolve areas of concern to ensure that the department obtains and complies with necessary land use, water use, and environmental guidelines, licences, permits and approvals.

### **2. Review and evaluate potential environmental and socio-economic impacts of the MVH, proposals, operating procedures and practices, and provide environmental scoping for transportation planning.**

- Develops guidelines and best practices or similar instruments for environmental and socio-economic impact reduction and mitigation for the MVH.
- Critically reviews development plans, proposals and operating procedures.
- Designs and conducts or manages selective field studies of environmental impacts.
- Researches, collects, evaluates and provides environmental data, such as baseline inventories, resource reports, soil and water quality studies, etc. for consideration in planning, pre-design engineering studies and environmental studies.

- Conducts environmental screening, preliminary environmental impact studies, community consultation and traditional knowledge studies.
  - Interprets information, writes briefing and reports on environmental issues, and makes recommendations on the management of environmental impacts and potential mitigative measures.
  - Identifies environmental issues affecting renewable resources, resource users, the land and public safety as a result of the construction and operation of the MVH.
  - Works with Departmental staff to ensure appropriate attention is paid to the environmental implications of project design and operations are given due consideration.
- 3. Supports land use planning and acquisition of required land tenure for the MVH.**
- Conducts research and analysis to identify land use and tenure requirements for the project, including ownership, leases, reserves and land exchanges.
  - Supports the GNWT interdepartmental Land Exchange Working Group and works with various land owners to develop strategies to address land tenure requirements.
  - Provides advice on the negotiation of these leases, reserves and exchanges.
  - Conducts research and provides advice in matters related to land use, environmental, wildlife and other planning initiatives that would have implications for the project, including negotiation and implementation of land claims and self-government agreements.
- 4. Supports the implementation of Indigenous consultation and engagement strategies.**
- Develops supporting material and participates at public and private meetings with Indigenous governments, communities and individuals.
  - Establishes and maintains strong relationships with Indigenous governments and communities and colleagues in the Departments of Justice and Executive and Intergovernmental Affairs.
  - Works with colleagues in the Department and consultant contractors to ensure Indigenous perspectives and priorities are given consideration in developing work product.
  - Develops supporting material and undertakes public and private meetings with Indigenous governments, communities and individuals.
  - Maintains a record of consultation and engagement sessions, and provides input into the record of consultation.
  - Development of appropriate evaluation tools to monitor the effectiveness of the strategy.
  - Supports the implementation of arrangements and agreements with Indigenous governments to ensure Indigenous participation and partnership in planning and development of the MVH.
- 5. Ensures that the Department's regulatory compliance requirements are appropriately planned for with respect to mitigating the environmental impact of the MVH.**

- Researches and interprets information on applicable environmental and land use legislation including territorial, provincial and federal legislation, acts, policies, protocols, and guidelines to advise Departmental staff as required and to provide recommendations to the Manager, MVH Environmental Affairs on potential environmental impacts of construction and operation of the MVH.
  - Coordinates and/or undertakes activities and procedures for the Department's environmental review applications (i.e., the PDR and DAR), ensuring the Department's activities may proceed in an environmentally responsible manner.
  - Provides advice on the interpretation of environmental and land use legislation, regulations and policy.
  - Acts as liaison with regulatory agencies and government departments and, when necessary, acts as a facilitator between divisions and regulatory agencies to resolve areas of concern or obstacles to improve coordination and communication between various groups.
  - Ensures the Department obtains necessary regulatory permits, licences and approvals.
- 6. Prepares presentations, submissions for Cabinet and Financial Management Board and other Ministerial correspondence on matters relevant to the MVH.**
- Maintains system for collecting, managing and organizing information and commitments, and provides regular reporting on activities to the Manager and Director.
  - Researches, analyzes and prepares presentations, briefing notes, and Executive Council and Financial Management Board submissions and, where appropriate, develops options and recommendations.
  - Prepares and coordinates intra- and inter-Departmental input into correspondence, consistent with Departmental processes and procedures and deadlines for approvals and submissions.

## **WORKING CONDITIONS**

### **Physical Demands**

No unusual demands.

### **Environmental Conditions**

The incumbent may be exposed to a variety of weather while undertaking outdoor tasks. The incumbent will travel to communities and/or work sites approximately 25 times per year.

### **Sensory Demands**

No unusual demands.

## **Mental Demands**

The incumbent will travel to communities and/or work sites approximately 25 times per year. The work can involve politically sensitive issues and tight deadlines.

## **KNOWLEDGE, SKILLS AND ABILITIES**

- Knowledge of environmental legislation and regulatory processes in the NWT, along with the analytical capacity to interpret these in relation to infrastructure works and projects.
- Knowledge of project management processes in a northern context.
- Knowledge of consultation and engagement requirements.
- Knowledge of land use planning and land management regimes, and environmental and wildlife issues.
- Knowledge of NWT resource-related legislation and land claims and self-government agreements, Indigenous government institutions, governance systems and communities.
- Knowledge of environmental site assessment, audit and monitoring principles, and their applicability to a wide variety of transportation-related activities and operations along with the analytical ability to interpret these in relation to transportation works and projects.
- Knowledge of typical environmental and socio-economic impacts including mitigative techniques for development-related activities.
- Knowledge of northern ecosystems (Arctic and sub-Arctic) and the life functions of northern species, particularly fish and caribou.
- Knowledge and understanding of northern environmental and development-related issues, as well as northern history and culture.
- Knowledge of computer software, including word processing, database, e-mail and project management programs.
- Interpersonal and communication skills to make convincing and persuasive arguments when dealing with regulators, project team members, consultants, regional staff, contractors and community members.
- Analytical, consulting, problem solving skills, combined with common sense and creativity.
- Planning and organizational skills to meet work schedules and critical milestone dates, and to co-ordinate and organize own and subordinates' work activities with competing priorities in a multi-task work environment.
- Project management skills to deliver projects on-time and on-budget.
- Verbal and written and communications skills to exchange information and liaise with a wide variety of peers, colleagues and stakeholders.
- Ability to identify, assess and propose mitigation for adverse environmental and socio-economic impacts of large-scale transportation projects.
- Ability to analyze the results of studies, assessments, audits, and monitoring programs, with the objective of implementing mitigation strategies.
- Ability to work collaboratively in a team setting and cross-cultural environment.
- Ability to work within budget constraints.
- Ability to think critically and use good judgment.

- Ability to research, evaluate, gather and compile information.

**Typically, the above qualifications would be attained by:**

A university degree in Environmental Planning or Studies, Civil or Environmental Engineering, Natural Resource Management, Biology or similar relevant discipline, and three years of relevant experience.

**ADDITIONAL REQUIREMENTS**

**Position Security**

- No criminal records check required
- Position of Trust – criminal records check required
- Highly sensitive position – requires verification of identity and a criminal records check

**French language** (check one if applicable)

- French required (must identify required level below)  
Level required for this Designated Position is:  
ORAL EXPRESSION AND COMPREHENSION  
Basic (B)  Intermediate (I)  Advanced (A)   
READING COMPREHENSION:  
Basic (B)  Intermediate (I)  Advanced (A)   
WRITING SKILLS:  
Basic (B)  Intermediate (I)  Advanced (A)
- French preferred

**Indigenous language:** To choose a language, click here. To choose a language, click here. To choose a language, click here.

- Required
- Preferred