

The Inspector uses their skills and knowledge of engineering to educate employers and workers toward improving their Internal Responsibility System (IRS) and ensuring proper engineering and design standards and best practices are being followed. The Engineer conducts a variety of evaluations for proposed mine and/or existing mine sites (example: civil, mechanical and electrical engineering) The Engineer must take action to protect workers using his/her regulatory authorities when the IRS is not working or proposed designs are not up to code or following best practices.

The Engineer interacts with Employers, Workers, Contractors to ensure plans and procedures are consistent with the NT and NU *Mine Health and Safety Acts and Regulations*, the *Explosive Use Acts and Regulations* and vision of the WSCC. Official Mine contact is with the designated Mine Manager but extends to those subordinate to the Mine Manager as required. The responsibilities of the Chief are delegated to this position when required.

Working independently or as part of the Mining unit, decisions made by the Engineer regarding the enforcement of the NT and NU *Mine Health and Safety Acts and Regulations*, the *Explosive Use Acts and Regulations* and other legislation pertaining to worker safety can be appealed to the Chief. The Inspector's enforcement decisions and revisions to engineering design through reviews have a direct impact on working conditions and worker safety and reflect the integrity of the WSCC.

RESPONSIBILITIES

1. Collaboration with stakeholders through education, consultation, and providing resources and guidance.

- **Conducts engineering and design reviews for approval by the Chief, including but not limited to:**
 - Mine design to assess ground stability of the active and proposed workings of the mine;
 - Design of waste dumps and surface impoundments including a surveillance and instrumentation program, and stability of slopes on abandonment;
 - All mechanical equipment to ensure that it is designed in accordance with good engineering practice and constructed in accordance with a design and plans certified by a professional engineer;
 - Mobile equipment design – electrical system, braking system, exhaust system, steering system, fire suppression system, lighting system, roll over or fall on protection system and any other system design specified by the Chief Inspector;
 - Uses professional judgement and experience to review “Safety Plans” and “Work Plans” submitted by exploration companies, for approval by the Chief.
- **Appointed as Deputy Inspector under Section 11 of the Explosives Use Act.**
 - Evaluates candidates to confirm if qualified to write the Explosives Handling Permit exam.
 - Prepares, supervises, and marks examinations for qualified candidates to hold an Explosives Handling Permit to allow the handling and detonation of explosives at work sites not classed as a mine site.

- Liaises with the Federal NRCan – Explosives Division to ensure current Federal standards are being used for the evaluation of all explosives surface storage and handling operations.
- **Delivers the Mine Certification and Permit program.**
 - Prepares, supervises, and marks examinations for Blasting, Shift Boss, Hoist Operator's, Mine Rescue and Supervisors' certificates.
 - Reviews permit applications - explosives storage for surface and underground; detonator storage for surface and underground; use of a diesel engine underground; storage of diesel fuel underground; installation and use of a raise climber underground and installation of an elevator, as submitted by companies for approval by the Chief.
- **Other duties, including:**
 - Reviews applications for variances to the regulations and makes recommendations to the Chief.
 - Conducts Safe Advantage verifications at mines and with mine service providers and exploration companies.
 - Performs other duties within the work plan of the Mine Safety unit, such as NAOSH, Skills Canada, and tradeshow.
 - Participates and assists in other WSCC programs such as tailgates, OHSC and Mine Rescue Competitions.
 - Takes on duties of the Chief during absences.

2. Collaboration with stakeholders to ensure compliance through review and analysis of the inspection protocols within directed services.

- Inspects surface and underground mines to assess compliance with the *Mine Health and Safety Acts* and Regulations.
- Inspects exploration camps and ice roads servicing the minerals industry to ensure the operations comply with the *Mine Health and Safety Acts* and Regulations and meet all safety standards.
- Inspects blasting sites (except mines) to assess compliance to the *Explosives Use Act* and Regulations.
- Issues orders to the mine manager to comply when they are not operating the worksite in accordance with provisions of the *Mine Health and Safety Acts* or Regulations.
- Meets with mine management, representatives of the Occupational Health and Safety Committee, and union, if present, to discuss safety issues in the workplace.

3. Participates in regulatory activities through the investigation protocols for issues of non-compliance to the *Mine Health and Safety Acts and Regulations*.

- Investigates accidents that have caused loss of life.
- Investigates incidents that have caused property damage or an injury to any person or a dangerous occurrence when deemed necessary in consultation with the Chief.
- Suspends or cancels a supervisor, shift boss, blasting or hoist operator certificate when warranted.
- Investigates Work Refusals when directed by the Chief.
- Conducts investigations of discrimination cases when directed by the Chief.

- Prepares and provides written reports of investigations to the Chief.

4. Participates in regulatory activities through the prosecution activities for issues of non-compliance of the *Mine Health and Safety Acts and Regulations*.

- Recommends charges and prosecution arising from investigations to the Chief.
- Attends court to testify or to act as an expert witness.

WORKING CONDITIONS

When not conducting inspections or investigations in the field the incumbent works in an office environment with few unusual conditions. The following conditions apply mainly to fieldwork:

Physical Demands

The incumbent will be required to walk on uneven surfaces and ramps on surface and underground, traverse ladder ways between levels or in process plants and wear various types of personal protective equipment depending on the situation.

Frequency: 1 to 2 times per month

Duration: For up to 7 days at a time, 10 to 12 hours per day.

Intensity: High

Environmental Conditions

Incumbent will be exposed to work in extreme winter conditions, rain, cold to wet and humid underground conditions, hazardous substances, toxic fumes, high noise levels and full body vibration.

Frequency: 1 to 2 times per month

Duration: For up to 7 days at a time, 10 to 12 hours per day.

Intensity: High

Sensory Demands

The incumbent will require the use of all senses when performing fieldwork as poor judgment could prove to be fatal. Fieldwork entails exposure to mechanical, electrical and toxic health hazards that need to be identified through the various senses.

Frequency: 1 to 2 times per month

Duration: For up to 7 days at a time, 10 to 12 hours per day.

Intensity: Very High

Mental Demands

The incumbent will be required to travel by commercial aircraft, small charter aircraft, helicopter and vehicles to carry out inspections or investigations in isolated northern sub-arctic regions one to two times a month for a period of up to 7 days. The incumbent is also required to occasionally drive on ice roads during winter months.

The incumbent will be responsible for an extensive amount of critical decision making with high stress levels while carrying out investigations, as poor judgment on behalf of the Engineer could expose the Chief and the WSCC to unnecessary liability for malicious prosecution, or jeopardize the health and safety of workers at mine sites and exploration sites. Pressures are brought to bear when the Engineer is brought into disputes between labour and management, issuing stop work orders or conducting inspections where substandard/non-compliant conditions are found. Serious injury and fatality investigations can lead to very extensive mental and emotional fatigue. Legal procedures and courtroom duties can be very stressful.

Frequency: 1 to 2 times per month for inspections/investigations plus 50% of office time

Duration: Continuous as part of the job function

Intensity: High

KNOWLEDGE, SKILLS AND ABILITIES

- Demonstrated knowledge of mining practices and technology.
- Broad knowledge of occupational health and safety.
- Broad knowledge of standards as they apply to various industries.
- Demonstrated knowledge and understanding of regulatory enforcement.
- Knowledge of the *Mine Health and Safety Act and Regulations*.
- Knowledge of the *Explosive Use Act and Regulations*.
- Knowledge of inspections, investigations and prosecutions.
- Proven experience working in a mining environment.
- Demonstrated time management, planning, and organizational skills.
- Excellent interpersonal and conflict resolution skills.
- Excellent negotiation/facilitation skills.
- Experience in written and verbal communication skills.
- Experience in working with computers, including word processing, spreadsheets and presentation software.
- Proven ability to work in an environment with constantly changing priorities. This includes the ability to assess and constantly evaluate priorities
- Ability to research, analyze and interpret legislation and standards as they apply to various industries and or work practices.
- Ability to function well in a cross cultural environment.
- Ability to work in a team environment.
- Ability to work alone at remote work sites.
- A valid class 5 driver's license.

Typically, the above qualifications would be attained by:

Having an engineering degree in a relevant discipline; preferably mining, from an accredited university. Must be registered or be eligible for registration as a Professional Engineer in the NT and NU. A valid class 5 Driver's License is required. This position requires seven years of experience working at a mine or in the mining/exploration industry, to include at least five

years spent in production operations and at least one year supervisory experience at a mine.
(Requirement under the *Mine Safety Regulations* – Section 19.02)

Membership as a Certified Registered Safety Professional would be considered an asset.

ADDITIONAL REQUIREMENTS

Position Security (check one)

- 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

Aboriginal language: To choose a language, click here.

- Required
- Preferred

CERTIFICATION

Title: Inspector of Mines/Engineer
Position Number(s): 97-0503 & 97-7949

<p>_____ Employee Signature</p> <p>_____ Printed Name</p> <p>_____ Date</p> <p><i>I certify that I have read and understand the responsibilities assigned to this position.</i></p>	<p>_____ Supervisor Signature</p> <p>_____ Printed Name</p> <p>_____ Date</p> <p><i>I certify that this job description is an accurate description of the responsibilities assigned to the position.</i></p>
<p>_____ Senior Manager</p> <p>_____ Date</p>	
<p>_____ President & CEO</p> <p>_____ Date</p> <p><i>I approve the delegation of the responsibilities outlined herein within the context of the attached organizational structure.</i></p>	
<p>The above statements are intended to describe the general nature and level of work being performed by the incumbents of this job. They are not intended to be an exhaustive list of all responsibilities and activities required of this position.</p>	

Reviewed by Human Resources: _____