



IDENTIFICATION

Department	Position Title	
Infrastructure	Operating Engineer	
Position Number	Community	Division/Region
33-1111	Yellowknife	North Slave Region

PURPOSE OF THE POSITION

As part of the Facilities Management unit of the North Slave Region of the Department of Infrastructure, the Operating Engineer is responsible for the safe, effective, and efficient operation, repair and maintenance of plumbing, heating, ventilation, air conditioning, refrigeration and all other mechanical equipment in all Government of Northwest Territories (GNWT) occupied and or leased buildings and facilities in the Yellowknife and North Slave area. All work is completed in accordance with GNWT acts and regulations, national and municipal codes, and departmental policies and procedures.

SCOPE

The position is one in a team of Operating Engineers who report to the Chief Operating Engineer but takes direction from the Operating Engineer Lead Hand for operational activities. This position is located in Yellowknife and provides the primary operational, repair and maintenance support assets in Yellowknife, Ndilo, Dettah, Behchokò, Whatì, Gamètì, Wekweètì, and Łutselk'e.

The scope of activities undertaken includes:

- Operations of building heating and mechanical equipment;
- Monitoring and maintaining indoor air quality and comfort;
- Monitoring, inspecting, testing, repairing, and maintaining equipment that supplies electricity, steam, heat, refrigeration, air conditioning, compressed air, gas, and ventilation within a building;
- Adjusting and using Computerized Direct Digital Control (DDC) systems to control air, heat, and lighting and ventilation equipment in buildings;
- Initiation and management of contracts and contract performance up to assigned spending authority starting at \$5,000.
- Coordinate and monitor contracted services in assigned buildings.



The team of Operating Engineers have responsibility for one highly complex building and 16 moderately complex buildings in a total portfolio of approximately 75 buildings.

Knowledge is maintained and increased in this position through continual training and exposure to new or specific technology, systems, equipment, standards and processes.

The incumbent travels for up to four days a month to provide Operating Engineering and Settlement Maintainer services a community, e.g. school, health centres, tank farms, and air terminal buildings.

The Operating Engineer work in high security environments such as the correctional facilities, the Legislative Assembly and airports. Within the scope of service, these positions carry a high degree of direct responsibility for the safety, security and comfort of building occupants.

RESPONSIBILITIES

1. Operates, monitors and reports on mechanical operations and the performance of building systems, and takes corrective action to ensure safe, efficient and effective operations.

- Inspects building mechanical, heating, and ventilation systems, and equipment housed within assigned buildings to ensure safe, reliable and efficient operations as directed by the Maintenance Management System (MMS) Manual and as per code.
- Applies prescribed building and equipment legislated inspection, calibration and maintenance procedures as per the MMS.
- Manages and operates building power plants in accordance with *GNWT Boilers and Pressure Vessels Act* and Regulations, which includes combustion analysis, boiler testing and addition of chemicals to prevent corrosion on boilers and equipment.
- Adjusts boilers to ensure energy efficient operations.
- Completes computerized assessments of buildings heating problems with DDC systems.
- Identifies and diagnoses problems and potential problems with buildings, equipment, systems and DDC systems.
- Reports the outcome of inspection and initiates required maintenance on a work order.
- Completes work orders and records information on computerized tracking system.

2. Coordinates, services and repairs regular and legislated preventative maintenance tasks, on assigned equipment and systems to ensure safe and efficient operation and longevity of GNWT assets.

- Tests and maintains alarm systems and fire protection equipment, including sprinkler systems and smoke alarms, as per the fire prevention act to ensure proper operations.



- Coordinates, services and repairs equipment, systems and building structures to ensure an effective and quick return of operations for all required repairs on GNWT assets.
 - Responds to urgent and/or emergency situations including stabilization of failures, determination of cause and coordination of corrective actions.
 - Replaces or refurbishes defective components on all mechanical equipment.
 - Initiates and manages contracts and contract performance through the repair process.
 - Reviews work schedules with contract workers.
 - Completes work orders and records information on computerized tracking system.
- 3. Maintains, adjusts, and repairs pneumatic and electronic Heating Ventilation and Air Conditioning (HVAC) control systems and equipment to ensure proper operation.**
- Provides onsite support to DDC and Environmental Management Control Systems (EMCS) suppliers for remote computerized diagnostics and troubleshooting.
 - Inspects, services and repairs to HVAC systems.
 - Adjusts settings and schedules on the DDC and EMCS systems.
 - Assists the DDC and EMCS supplier technicians with the scheduled preventative maintenance and program updates.
 - Identifies and reports needed maintenance and repairs and recommends solutions.
 - Monitors contract workers.
- 4. Carries the primary Duty Officer decision role in the absence of authority during evening, nights and weekends for emergency responses. All of these responses will present situations where there is a threat of injury, property damage, security breach or a decrease in client comfort.**
- As Duty Officer, provides 24 hour-standby for one full week including weekends every seven weeks.
 - As Duty Officer, performs functions to ensure a quick response after hours to emergency calls and to comply with regulation for units requiring after hours maintenance.
 - Performs diagnostics and coordinates repairs over the phone for emergency responses in communities.
 - Performs scheduled mechanical checks as per the *Pressure Vessels Act*.
 - Responds to urgent and emergency calls and alarms (mechanical, fire, intrusion) including stabilization of failures, determination of cause and coordination of corrective actions before the next regular shift as necessary.
- 5. Travels for up to four days to one of the North Slave communities on a regular monthly basis to perform maintenance on community buildings to ensure safe, efficient and effective operations of buildings in those communities. Travels to communities on an emergency basis as required.**
- Makes travel and accommodation arrangements.
 - Monitors operations and performance of building systems.



- Performs preventative maintenance checks, repairs and services on assigned equipment assigned equipment and building systems.
- Represents the Department in the community and liaises with tact and diplomacy.
- Develops courteous rapport with community representatives.
- Reports trip findings to Regional Maintenance Coordinator and supervisor.

WORKING CONDITIONS

Physical Demands

Over 50% of time is spent at substantial work such as climbing and/or balancing, stooping, kneeling, crouching and/or crawling, reaching, or handling. The position involves lifting from 10 to 25 kilograms on a regular basis and heavier weights from time to time. The position involves outside work where temperatures are extreme for several months a year.

Environmental Conditions

Over 50% of the time this position is substantially exposed to fumes, temperature, toxic chemicals, loud noise, infectious substances and scalding steam a considerable amount of the time while maintaining and servicing buildings and systems.

Sensory Demands

Over 50% of this position requires a moderate amount of feeling, hearing, and seeing (in terms of acuity far and near, depth perception, accommodation, colour vision and field of vision).

Mental Demands

The position requires disruption of lifestyle while the incumbent is on 24-hour standby for one full week including weekends every seven weeks. As well, the incumbent is required to travel overnight on a monthly basis for up to four days/three nights to communities and to work alone. Further mental demands are placed on the incumbent when dealing with unsatisfied clients. While working at correctional facilities, the incumbent is required to be on continuous alert as they are exposed to risks of possible physical confrontations.

This position is deemed continuous and must always be available for work during the GNWT shutdown period around holidays and must coordinate vacations and accept restrictions in scheduling around mandatory leave periods.



KNOWLEDGE, SKILLS AND ABILITIES

- Knowledge of steam and hydronic boiler systems, HVAC controls, DDC systems, electrical systems, energy management and control systems, plumbing, ventilation systems, oil burner maintenance and repair, sprinkler and alarm systems.
- Knowledge of safety procedures, confined spaces, asbestos and mould identification and abatement.
- Knowledge of various codes and acts such as the *Boiler and Pressure Vessels Act*, *National Fire Prevention Act*, National Fire Code, National Building Code, *Public Health Act* and other applicable legislation as they relate to the status of buildings and equipment.
- Analytical thinking and information seeking skills in order to understand complex technical issues, determine cause of problems and system failures to ensure proper corrective actions occur with an understanding of the impact on the equipment, systems and clients.
- Ability to read and interpret blueprints and operation manuals.
- Ability to communicate and effectively interact with clients and contractors.
- Ability to actively listen, understand and respond appropriately and effectively with individuals and groups both verbally and in writing.
- Ability to effectively use computers, controls software, diagnostic equipment and hand/power tools.
- Ability to commit to actively upholding and consistently practicing personal diversity, inclusion and cultural awareness, as well as safety and sensitivity approaches in the workplace.

Typically, the above qualifications would be attained by:

A fourth (4th) Class Power Engineer Certification and two (2) years' of relevant experience in building maintenance/plant management field.

Equivalent combinations of education and experience will be considered.

ADDITIONAL REQUIREMENTS

A Class 5 driver's licence.

Basic security training is a requirement of the position and will be provided by the North Slave Correctional Centre.

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

Indigenous language: Select language

- Required
 Preferred