IDENTIFICATION

Department	Position Title	
Infrastructure	Hospital Engineering Technician	
Position Number	**Community**	**Division/Region**
33-5446	Inuvik	Beaufort Delta

PURPOSE OF THE POSITION

As part of the Facilities Maintenance section for the Beaufort Delta Region of the Department of Infrastructure in Inuvik, the Hospital Engineering Technician operates repairs, maintains and enhances Northwest Territories Health and Social Services Authority - Beaufort Delta Region (NTHSSA Beaufort Delta) assets, in addition to providing client support to meet operational needs and emergency responses. This position works in accordance with applicable standards, codes and processes for a hospital context (CSA, UL, ASME, NFCC, ASHRAE, manufacturers and accreditation) so that NTHSSA Beaufort Delta assets are maintained in optimum condition. This position works within Government of Northwest Territories (GNWT) acts and regulations, hospital policy and procedures, and building codes to ensure a safe and comfortable environment for patients, staff and visitors.

SCOPE

This position, located in Inuvik and reports to the Hospital Maintenance Supervisor.

The scope of activities undertaken include:

- Operation of building heating and mechanical equipment.
- Monitoring and maintaining indoor air quality and comfort.
- Monitoring, inspecting, testing, repairing, maintaining, operating and utilizing Direct Digital Control (DDC) equipment which supplies electricity, steam, heat, refrigeration, air conditioning, compressed air, gas and ventilation within the building.
- Schedule and perform all minor and major repairs on all heating and mechanical equipment.
- Use DDC systems to control air, heat, and lighting and ventilation equipment in buildings.
- Reviews work orders with the various contractors in designated buildings and monitors work assigned to contractors.

- Initiation of contracts and contract performance up to assigned spending authority of $5,000.00.

Within the scope of service, this position has authority to determine the most effective means to achieve approved end results to meet the clients' needs within predetermined budgets, standards, and processes. Within the scope of service this position carries a high degree of direct responsibility for safety and comfort for patients, staff, and visitors.

RESPONSIBILITIES

1. **Monitor and report on mechanical operation and performance of building systems, taking corrective action to ensure safe, efficient and effective operations.**
   - Inspects building's mechanical systems, heating systems, ventilation systems, and equipment housed within assigned buildings as directed by the Maintenance Management System (MMS) manual and as per code.
   - Applies prescribed building and equipment legislated inspection and maintenance procedures as outlined in the MMS.
   - Conducts boiler water testing and add chemicals to prevent corrosion.
   - Conducts combustion analysis on boilers.
   - Adjusts boilers to ensure energy efficient operations.
   - Completes computerized assessments on building heating problems with DDC systems.
   - Identifies and diagnoses problems and potential problems with building equipment, systems and DDC systems.
   - Reports inspection and maintenance plan on work orders.
   - Initiates response to urgent and/or emergency situations: evaluates, stabilizes and reports to the supervisor.
   - Completes work orders and records information on computerized tracking system.

2. **Service and repair mechanical equipment and systems as part of legislated and regular preventative maintenance to ensure safe and efficient operation and economic life cycle.**
   - Services and repairs boilers, humidifiers, air handling units, dampers and related control systems and components.
   - Lubricates equipment.
   - Replaces (worn-out) components belts, pulleys and filters.
   - Checks and replaces mechanical insulation if required.
   - Replaces or refurbishes defective components on all mechanical equipment.
   - Initiates contract repair process.
   - Reviews work schedules with contract workers.
   - Heating, Ventilation and Air Conditioning (HVAC), plumbing and mechanical equipment repairs.

3. **Maintain, adjust and repair pneumatic and electronic HVAC control systems and equipment to ensure proper operation.**
   - Inspects, services and repairs HVAC control systems.
   - Adjusts settings and schedules on the DDC systems if and when required.
   - Provides onsite support to DDC suppliers for remote diagnostics and troubleshooting.
   - Assists the DDC supplier technicians with the scheduled preventative maintenance and system updates.
   - Identifies and reports needed maintenance and repairs.
   - Monitors contract workers.
   - Completes work orders and reports.

4. **Test alarm systems and fire sprinkler systems in accordance with regulations to ensure proper operation.**
   - Conducts legislated monthly inspections, and testing of equipment and systems.
   - Identifies and reports needed maintenance and repairs.
   - Identifies and reviews work with contract workers.
   - Enters reports into logbooks.

5. **Perform Duty Officer functions to ensure a quick response after hours and to comply with regulations for units requiring after-hour maintenance.**
   - As Duty Officer, provides 24 hour-standby for one full week including weekends every fourth week.
   - Performs scheduled mechanical checks required by the *Pressure Vessels Act.*
   - Responds to urgent and emergency calls and alarms (mechanical, fire) including stabilization of failures, determination of cause and coordination of corrective actions before the next regular shift as necessary.
   - Calls supervisor if beyond scope of practice.

6. **Provide a supporting role in the hospital emergency response through:**
   - Establish processes and roles in support of several Hospital emergency response plans, such as fire, mass casualty, staff assistance, bomb threats, elevator rescues, chemical spills, loss of utilities, and equipment system failures.
   - Provide a primary decision and support role during absence of authority during evenings and weekends for emergency responses.

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. This position is expected to work with professional tools on a frequent basis, some of which are very hazardous if not applied correctly.

Environmental Conditions

Over 50% of the time this position is substantially exposed to fumes, temperature, chemicals, loud noise and scalding steam a considerable amount of the time while maintaining and servicing buildings and systems. The incumbent may be exposed to infectious substances and toxic substances when working with sewage systems. The position involves outside work where temperatures are extreme for several months.

Sensory Demands

Over 25% of this position requires a moderate amount of feeling, hearing and seeing, in terms of acuity far and near, depth perception, accommodation, color vision and field of vision, as this position routinely works with complex environmental system, equipment and devices. Operational condition checks, fault repairs, and maintenance service requires concentrated levels of attention in order to discern conditional discrepancies and safely conduct corrective actions.

Mental Demands

The incumbent is required to be on 24-hour standby one full week including weekends, every fourth week.

KNOWLEDGE, SKILLS AND ABILITIES

- Knowledge of steam and hydronic boiler systems, HVAC controls, DDC systems, electrical systems, energy management and control systems.
- Knowledge in plumbing, ventilation systems, oil burner maintenance and repair, sprinkler and alarm systems are also required.
- Knowledge of legislation, standards and policies related to the status of buildings and equipment.
- Skills in troubleshooting, form and spatial perception, manual dexterity, special testing equipment use, monitoring contractor performance, and computer applications.
- Problem solving, report writing and both verbal and written communication skills.
- Ability to interpret blueprints and schematic drawings.

- Ability to perform minor repairs.
- Ability to understand and apply mathematical concepts.
- Ability to work in demanding situations and multiple priorities.
- Skilled in the use of computers, software, diagnostic equipment and hand/power tools, along with skills in the application of maintenance materials and working on electrical, electronic, mechanical systems, equipment and devices, along with building structures and finishes.
- 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:

Certification as a 4th Class Operating Engineer and two years of experience working as an Operating Engineer in commercial buildings.

Equivalent combinations of education and experience will be considered.

ADDITIONAL REQUIREMENTS

A class 5 driver's licence

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