



IDENTIFICATION

Department	Position Title	
Infrastructure	Apprentice Plumber/Gasfitter	
Position Number(s)	Community	Division/Region(s)
33-13337	Fort Smith	Facilities/South Slave

PURPOSE OF THE POSITION

The purpose of this position is to obtain the combination of education and work experience required to obtain journeyman certification. The required work experience will be obtained by assisting in preventive maintenance (PM) checks, service and repair of the plumbing and heating systems in all Government of the Northwest Territories (GNWT) owned and operated buildings in Fort Smith.

SCOPE

Reporting to the Facilities & Maintenance Coordinator in the Fort Smith Office, this position assists in the delivery of plumbing/gas fitting/oil burner mechanic services and preventive maintenance for GNWT owned and operated buildings in the South Slave Region to ensure GNWT owned and operated building environments are safe.

The Apprentice Plumber / Gasfitter assists in the maintenance of plumbing and heating equipment to GNWT buildings to ensure safe and efficient operation through testing and installation of replacements of equipment on boilers, furnaces and heating, ventilation and air conditioning systems. The incumbent assists in the review of work completed by contractors to ensure compliance with plans, specifications and governing codes.

RESPONSIBILITIES

- 1. Over the course of the Apprenticeship, the incumbent will learn to ensure satisfactory operations and inspects plumbing systems, ventilating systems, hot water heating systems, water plants and equipment in GNWT buildings by:**
 - Conducting regular preventive maintenance checks of plumbing and heating systems and equipment, including all mechanical installations and heat recovery;

- Diagnosing faults in plumbing and heating systems in accordance with the Maintenance Management Systems (MMS);
 - Identifying repairs required to correct deficiencies;
 - Completing inspection reports on deficiencies.
- 2. Over the course of the Apprenticeship, the incumbent will learn to maintain plumbing, hot water and forced air heating equipment in GNWT buildings to ensure a safe and efficient operation by:**
- Repairing and replacing boilers, furnaces and heating, ventilation and air conditioning systems;
 - Repairing and testing of HVAC (Heating, Ventilation and Air Conditioning) control systems, both electric and pneumatic;
 - Repairing and replacing plumbing equipment such as bathroom and laundry fixtures, sump pumps, hot water tanks, drinking fountains, emergency showers and eye wash stations;
 - Installing complete plumbing and heating systems;
 - Repairing or replacing frozen sewer and water systems;
 - Repairing or replacing mechanical insulation on pipes, tanks, boilers, breeching, ducting, etc.
- 3. Over the course of the Apprenticeship, the incumbent will learn to check work on plumbing and heating systems performed under contract to ensure compliance with plans, specifications and governing codes by:**
- Installing, repairing and servicing propane and anti-fuel oil systems in GNWT buildings;
 - Troubleshooting problems in heating, ventilation and plumbing systems in GNWT buildings;
 - Reviewing plans and specifications for renovations and new construction projects;
 - Repairing sprinkler systems, including piping, heads, dry valves, fire pumps, and jockey pumps;
 - Conducting inspections of all plumbing and heating installations;
 - Identifying any deficiencies in workmanship;
 - Completing inspection reports.
- 4. Over the course of the Apprenticeship, the incumbent will learn to maintain community water systems to ensure satisfactory operation by:**
- Conducting regularly scheduled maintenance and conducting repairs or replacement on water intakes, pumps, frost protection, etc.;
 - Conducting regularly scheduled maintenance, repair and replacement of water storage tanks and piping, delivery and circulation pumps, heat exchangers, and other related equipment;
 - Conducting regularly scheduled maintenance, repair and replacement of piped waste and sewage systems, controls, heating systems, pumps, insulation, and services to GNWT buildings.

- 5. Over the course of the Apprenticeship, the incumbent will learn to complete records for all maintenance and repairs to plumbing, heating and water systems, and equipment by:**
- Identifying supplies required to complete jobs, and compiling material lists;
 - Completing work orders for all work assignments indicating materials used, work accomplished and time required to complete jobs;
 - Accounting for eight hours of time daily, plus any overtime hours.
- 6. Over the course of the Apprenticeship, the incumbent will learn to perform other duties, such as:**
- Testing and repairing fire extinguishers and sprinkler systems;
 - Controlling the use of materials and supplies from the trades shop;
 - Assisting other tradespersons in emergency situations (e.g. following instructions of the electrician during major power failures);
 - Assisting the Stationary Engineer and other tradespersons as required;
 - Working overtime and on call as required;

WORKING CONDITIONS

Physical Demands

Works in cramped, awkward, and confined spaces, and in hazardous conditions; frequently, 2hrs per day, with moderate physical fatigue or stress. Lifts and moves heavy objects in cramped, awkward, and confined spaces; frequently, 2hrs per day, 3 times per week, with moderate physical fatigue or stress. Heavy lifting and moving of boiler sections, large electric motors, pumps, piping, etc.; frequently for items up to several hundred pounds, 4hrs per week, with moderate to extreme physical stresses, discomforts, and risk, of accidents. Uses safety equipment such as goggles, masks, gloves, coveralls, safety boots and other special equipment as required; frequently, 6hrs per day, with minimal to moderate physical fatigue or stress. Operates hand and power tools and testing equipment; frequently, 2hrs per day, with minimal to moderate risk of accident.

Environmental Conditions

Works in obnoxious odors from sewer systems, steam/hot water, and chemicals; occasionally, 2hrs per day, 2 times per week, with moderate to extreme sensory attention, substantial risk of accident or ill health, and considerable discomfort. Works in extreme cold or heat; frequently, 2hrs per day, with extreme physical discomfort and risk of accident. Works with natural gas-fired appliances and boilers; occasionally, 4hrs per week, with substantial risk of accident or ill health.

Sensory Demands

Must be focused on sounds and hand/eye coordinator; frequently, 8 hours per day, with moderate risk of accident or ill health.

Mental Demands

Travel to communities in small aircraft and in various weather conditions; frequently, 4hrs per month, with moderate mental stress. Ice road travel to small communities during winter months, 8hrs per month, with moderate risk of accident.

KNOWLEDGE, SKILLS AND ABILITIES

- Ability to maintain accurate records.
- Ability and willingness to keep up-to-date with technology.
- Ability to use a computer.
- Ability to attend Trade Instruction Courses in Fort Smith or Alberta for at least one 8 week period each year.
- Successful completion of a Trades Entrance exam.

Typically, the above qualifications would be attained by:

- Completion of English 10, Math 10 or 13, pure math 10 or Applied Math 10, Science Grade 10 OR the equivalent; related experience is an asset.
- Incumbent must possess a Class 5 Driver's License.
- Continued employment as an apprentice is conditional upon the successful completion of the required hours of experience, coursework and exam for each level in the apprenticeship program.

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

Aboriginal language: Choose a language

- ☐ Required
- ☐ Preferred