

### 1. IDENTIFICATION

<b>Position No.</b> 14-3240	<b>Job Title</b> Utilidor System Operator	<b>Supervisor's Position</b> Utilidor Systems Officer	
<b>Department</b> Community & Government Services	<b>Division/Region</b> Kivalliq	<b>Community</b> Rankin Inlet	<b>Location</b> Nunavut

### 2. PURPOSE

<p><b>Main reason why the position exists, within what context and what the overall end result is.</b></p> <p>The incumbent will have the primary technical, operational and maintenance responsibility for the complex water/sewer treatment and piped water/sewer distribution system for Rankin Inlet and to ensure the water is safe and system is operated as energy efficiently as possible.</p>
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### 3. SCOPE

<p><b>Describe the impact the position has on the area in which it works, or if it impacts other departments, the government as a whole, or the public directly or indirectly. How does the position impact those groups/individuals, the organization and/or budgets? What is the magnitude of that impact?</b></p> <p>The incumbent has the primary responsibility to provide safe drinking water and water/sewer piped service for the community of Rankin Inlet. Water is supplied by a supply and return system back to the pump house and water needs to be tempered to keep the water from freezing. Chlorine Gas and Fluoride solution is added to the water and must be tested daily to ensure the levels are kept within a safe range and water is safe to drink. Any major water breaks in town system need to be repaired immediately to prevent water loss from the town storage tank and possible damage to surrounding buildings. Failure to monitor the system, complete repairs in a timely basis or failure to provide proper water treatment could cause a serious health risk or disruption of services to the community of Rankin Inlet.</p>
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## 4. RESPONSIBILITIES

Describe major responsibilities and target accomplishments expected of the position. List the responsibilities that have the greatest impact on the organization first and describe them in a way that answers *why* the duties of the position are being performed. For a supervisory or management position, indicate the subordinate position(s) through which objectives are accomplished.

### **Daily System Operations:**

Perform daily checks on the pump houses, sewage treatment plant and lift stations to ensure proper operations and completes minor repairs or makes adjustments as required.

Fill out the Operator's reports and checklists for water consumption, chlorine and fluoride records sheets etc.

Complete daily water testing for chlorine residuals and fluoride residuals on the water supply and return lines and adjusting feed rates to ensure proper residual levels.

Checks the system operation by reviewing the Honeywell Computer program for the system. ( Williamson Lake Pump House, Nippisar Lake Pump house, Sewage Treatment Plant, Nuvuk Lift Station, Johnston Cove Lift Station) Checks for problems temperatures, flows, tank levels and prints up reports on problem areas everyday.

Remove solid waste from sewage treatment plant with dump trailer.

Twice a month collect water samples for bacterial testing.

### **Ongoing PM and Repairs Program:**

Inspects and exercises valves in the manholes, test fire hydrants.

Repairs and Rebuilds equipment (ie: Submersible pumps etc) as required or as directed by the M.M.S. Schedule.

Supervises casuals and contractors in the sewer rodding, cleaning of mains and access vaults, replacement of damaged water sewer mains, repairing of water/sewer mains due to dips etc. Installing new HDPE mains and using butt fusion machines to weld the pipes together.

Operate and repair the Utilidor system by using and training other staff and contractor to use the Sewer cleaning machine, Sewer Camera and taking picture of the inside of water and sewer mains to identify damage or problems and required repairs, butt fusion machines, Steaming machines for thawing frozen water/sewer mains.

Maintains the pump houses lift stations, and treatment plant and keeps the buildings in good working order and clean. This includes the diesel generators, boilers, fuel lines, pumps, burners controls, DDC Controls etc.

**Improvements to the Utilidor System:**

Works with both the technical and trades staff to improve the system.

Keeps impeccable records to help provide the case proof for a major replacement or upgrade to the system.

**Performs other Duties such as:**

Maintains proper house keeping practises in the work areas, by removing old materials and parts and cleaning up after each job, putting all guards, ceiling tiles back in the proper location. Closing and locking the access vaults to prevent tampering to valves and safety for neighbour hood children.

Maintains an inventory of spare parts for all facilities and equipment. Keeps manufacturer's information on all equipment and parts for proper operation, trouble shooting and installation guides.

Follows safety rules and procedures as established for the work place.

Provides input and sits on the department's safety committee.

Investigates water meter problems and correct them.

Performs other related duties to ensure safe and constant supply of water to the Hamlet of Rankin Inlet.

## 5. KNOWLEDGE, SKILLS AND ABILITIES

**Describe the level of knowledge, experience and abilities that are required for satisfactory job performance.**

*Knowledge* identifies the acquired information or concepts that relate to a specific discipline. *Skills* describe acquired measurable behaviors and may cover manual aspects required to do a job. *Abilities* describe natural talents or developed proficiencies required to do the job.

**These requirements are in reference to the job, not the incumbent performing the job.**

Working knowledge of all building and mechanical systems.

Journeyman Plumber with three years experience.

Oil Burner Mechanic to make repairs and adjustments to the heating plants.

Must possess a 5<sup>th</sup> class Stationary Engineer Certificate to meet the minimum regulatory requirement for maintaining a heating plant over 750 KWatt.

Water Plant Operators Certification from the NTWWA.

Valid 5<sup>th</sup> class driver's license.

Working knowledge of how to use a computer, must be familiar with Microsoft Outlook and Word.

Several years experience working with DDC controls, from daily operations to replacement of defective DDC devices.

Must be familiar with WHMIS and Confined Space Entry Safety procedures.

Knowledge of Northern Building practises and strong understanding water/sewer systems buried in the ground in a permafrost environment are essential.

The ability to speak Inuktitut/Inuinnaqtun is considered an asset.

## 6. WORKING CONDITIONS

**List the unavoidable, externally imposed conditions under which the work must be performed and which create hardship for the incumbent. Express frequency, duration and intensity of each occurrence in measurable time (e.g. every day, two or three times a week, 5 hours a day).**

Work load can be heavy at times and work may not be very enjoyable when it's minus 35 C with a 40 km winds and a frozen or plugged sewer main needs to be cleared. Repairs on water/sewer mains can take several very long days to repair (in excess of 12 to 14 hours shifts or longer in very in climate weather) The incumbent must be a self starter who is able to set priorities and can foresee implications for delays to completing repairs.

Incumbent will be working with water treatment chemicals that can be very dangerous if handled incorrectly.

Incumbent work environment can be very in climate, cold, damp, nauseous odors, windy, tight working conditions.

Customers dogs pose a hazard for doing repairs to the mains or doing the regular water meter readings.

### Physical Demands

**Indicate the nature of physical demands and the frequency and duration of occurrences leading to physical fatigue or physical stress.**

Must be able to work in hot, cold and wet conditions, climbing into manholes or trenches.

Must be in good physical condition as incumbent needs to be able to lift and carry generators, pumps and hoses, use hand shovel to dig trenches, carry, drag heavy water/sewer pipes and do all this under all weather conditions.

### Environmental Conditions

**Indicate the nature of adverse environmental conditions to which the jobholder is exposed, and the frequency and duration of exposures. Include conditions that increase the risk of accident, ill health, or physical discomfort.**

Often working in trenches in the winter involves icy conditions and poor visibility. There is a high risk of slipping while working and causing body strain or injury. Working in the sewage treatment plant is not a pleasant and hazardous to workers with possible airborne sewage particles (bacteria/virus)

### Sensory Demands

**Indicate the nature of demands on the jobholder's senses. These demands can be in the form of making judgments to discern something through touch, smell, sight, and/or hearing. It may include concentrated levels of attention to details though one or more of the incumbents' senses.**

Must have good hearing to determine if there is a change in the noise in mechanical rooms means that pumps or boiler are not working properly and minor adjustment now will prevent a major repair or break down later. Dexterity to be able to find and tighten screws and nuts in awkward positions & locations. Good balance for walking, climbing into trenches that may be ice covered in the winter.

### Mental Demands

**Indicate conditions within the job that may lead to mental or emotional fatigue that would increase the risk of such things as tension or anxiety.**

Working in hot, cold, wet, windy, smelly, noisy, tight environments doing urgent repairs and customers/clients demanding other problems be repaired immediately can lead to high anxiety and tension for the employee.

**7. CERTIFICATION**

_____ Employee Signature	_____ Supervisor Title
_____ Printed Name	_____ Supervisor Signature
_____ Date:	_____ Date
I certify that I have read and understand the responsibilities assigned to this position.	I certify that this job description is an accurate description of the responsibilities assigned to the position.
_____ Deputy Head Signature	
_____ Date  I approve the delegation of the responsibilities outlined herein within the context of the attached organizational structure.	

**8. ORGANIZATION CHART**

Please attach Organizational Chart indicating incumbent’s position, peer positions, subordinate positions (if any) and supervisor position.

**“The above statements are intended to describe the general nature and level of work being performed by the incumbent of this job. They are not intended to be an exhaustive list of all responsibilities and activities required of this position”.**