#### 1. IDENTIFICATION

Position No.	Job Title		Supervisor's Position		Fin. Code
14-03221	Water, Wastewater Systems Manager		Regional Facilities Manager		14715-01-3-320- 1406000-01-1000
Department		Branch/Division/Unit		.Community/Region	Location
,		Infrastructure/Asset Management/Facilities		Rankin Inlet / Kivalliq	21-71 Nuvua St. (CGS Main)

#### 2. PURPOSE

Main reason why the position exists, within what context and what the overall end result is.

Reporting to the Regional Facilities Manager, this position will be responsible for all operations, maintenance, billing/revenue collection and updates and improvements for the utilidor system in the community of Rankin Inlet and assisting the Facility Managers with operating and maintenance issues in 4 other Kivalliq communities where CGS operates and maintains the Water Treatment Plants. The incumbent will also be responsible for Minor and Capital projects with the Rankin inlet Utilidor through all stages of project planning, budgeting, implementation, completion and warranty follow-up. The incumbent will ensure the full training and development of all key staff members within their assigned work unit.

#### 3. SCOPE

Describe in what way the position contributes to and impacts on the organization.

This position is located in Rankin Inlet and oversees all aspects of preventative maintenance repairs to the utilidor system as well as providing expertise in the planning of any changes and/or additions to the system. The incumbent will collect and analyze all data, which will be used to effectively plan capital improvements, expansions and maintenance. Including maintaining an accurate user billing system for water and sewer usage and reviewing the full economic water rates yearly.

The position impacts on the efficiency of the community water and sewer system and the cost to the general public. Failure to identify deficiencies or have repairs done properly and timely can lead to major and costly repairs, safety hazards and/or cause delays and effect water/sewer servicing to the Public.

#### 4. RESPONSIBILITIES

Describe major responsibilities and target accomplishments expected of the position. For a management position, indicate the subordinate position(s) through which objectives are accomplished.

Directs maintenance and operation activities on all aspects of the utilidor systems.

- Designing and implementing a monitoring program in order to review and establish all maintenance and operational requirements.
- Manage an adequate resource base to insure satisfactory levels and quality of operation.
- Conducting and approving interim and final inspection on contracted/in-house work to ensure all applicable regulations and codes are strictly adhered to.
- Arranging and conducting on-site inspections on individual components, recommending solutions to potential maintenance problems and suggesting alternative technology.
- Inspects and approves all new and repaired utilidor services by contractors and GN staff.
- Reviewing and evaluating all available operational data to ensure the system maintains adequate levels of quality and efficiency.
- Auditing and evaluating mechanical processes and mechanisms on a regular basis to safeguard against potential failure or inadequacy.

Manages and Supervises the implementation of O&M, Minor and major Capital projects to ensure projects are completed on schedule and accordance with approved plans and specifications.

- Ensuring all contract documentation prepared by consultants or in-house is prepared properly and executed.
- Explaining contract terms and conditions and all applicable department regulations and procedures including the NNI Policy to successful contractors at pre-construction meeting.
- Reviews shops drawings.
- Negotiating contracts with contractors, hamlets and consultants.
- Coordinating and supervising progress inspections with consultants and contractors as required during the construction phase of projects. For O&M maintenance contracts on an ongoing basis.
- For the life of the project the incumbent submits reports and makes recommendations to

client on status of all technical aspects, scheduling and administration of capital funds for the consultant's and contractor's progress payments, enforcing/penalizing and reports to NTI the contractors adherence with the pre-set contract requirements for Inuit training, employment and goods & services.

- Coordinating interim and final inspections.
- Issuing interim and final certificate of completion.
- Coordinates and supervises warranty inspections and ensures the contractor rectifies warranty deficiencies.
- Reviewing O&M manual produced by consultants and contractors to ensure all aspects of the operation and maintenance information for the project has been included.
- Develops project briefs for Capital replacement projects for the Utilidor to access funding for these projects.
- Participates in the GN Capital Planning process by providing Technical, financial and project management advice.
- Directs the preparation of detailed designs and specifications to ensure the project is developed in accordance with the term of reference, departmental guidelines and regulatory bodies requirements.
- Arranging for and checking complete drawings for projects designed in-house.

Developing Terms of Reference and Scope of Work for proposals to be solicited from Architectural and Engineering firms (RFP for A&E Services) outlining the scope of work and project requirements.

# Develop, manage and accomplishment of the administrative responsibilities required for the operation of the utilidor system.

- Preparation of an annual budget for the operations and maintenance of the system, including revenue and expenditures for previous years, projected expenditures and identifying indirect costs associated with the system.
- Preparation of monthly and annual reports on system performance.
- Maintaining financial records on all associated costs to be used for future projections.
- Regularly evaluate energy consumption and costs associated with water systems and delivery, sewage facilities and associated buildings.
- Ensuring that adequate operational records are maintained to identify relevant trends.
- Tender, award and administer contracts relating to the operations and maintenance requirements of the system.
- Insuring an updated inventory of all system components is maintained.
- Liaison with individuals managing similar northern systems.

# Develop and update safety and emergency procedures associated with the utilidor system. Ensure that personnel are aware of system changes and any new procedures required by changes.

- Maintain and verify operations and maintenance manuals that include emergency plans for supply line ruptures and other catastrophes.
- Carry out and participate in simulations and exercises to ensure the reliability of emergency plans.
- Provide assistance and support during actual emergency situations ensuring that operations and repairs are handled effectively.
- Utilizing computer models to modify and update the water system to simulate both northern and emergency conditions.
- Organizing in-house or outside training seminars for personnel to upgrade working

knowledge of the system.

• Maintaining working relationship with the Fire Department to organize and carry out all necessary fire prevention exercises.

Working closely with the Hamlet of Rankin Inlet and the Municipal Planning Engineer to provide them with current information regarding the status of all aspects of the system and Planning replacement and upgrades to the system to improve the services to the community with the goal of transferring the Utilidor in stages to the Hamlet of Rankin Inlet.

- Attending Hamlet Council and Utilities Committee meetings and provide updated reports of the system performance.
- Taking a lead role in planning and implementing the transfer of ownership of the utilidor from the Nunavut Government to the Hamlet and negotiating a new Water and Sewer Agreement, which includes the utilidor.
- Being actively involved in all capital projects involving the utilidor system, from Terms of Reference to the warranty stage.
- Works with the Municipal Planning Engineer, to development of utilidor projects for the capital plan. Supply the Municipal Planning Engineer with cost data and system performance data as requested.

## Manage various financial aspects of the Utilidor system.

- Ensuring adequate public availability and compliance to existing regulation.
- Addressing and recommending solutions to public complaints.
- Ensuring reliability of applicant lists.
- Maintaining an efficient accounts receivable structure.
- Ensuring that bi-monthly invoicing for water and sewer usage to customers is accurate and timely.
- Investigation of higher than average meter reads before issuance of invoices.

#### Manages direct report subordinate staff within the Utilidor System Delivery Unit by;

- Supervising the Water Treatment Operator in the safe and reliable delivery of piped potable water to the Hamlet of Rankin Inlet.
- Reviewing workload, assigning tasks, goals, objectives to subordinates in support of Regional Facilities Management operational mandate.
- Supervising the Wastewater Systems Operator in the safe and reliable collection and treatment of wastewater to the Hamlet of Rankin Inlet.
- Ensuring the goals and objectives of the facilities unit are known to staff through regular and frequent contact.
- Regular review of employee documentation including recommendation of overtime use and Leave provisions.
- Ensuring the completion of annual individual employee learning and work plans based on the annual business plan, completion of periodic performance reviews and an annual performance summary.
- Reviewing staff work on a regular basis to ensure conformity to established quality standards and performance goals while implementing coaching/mentoring and/or disciplinary action as required.
- Actively contributing to a strong team environment within a respectful, safe and values based workplace.

# Manages and maintains regulatory compliance of piped water and wastewater collection services by;

- Ensuring adherence to GN regulations and laws with respect to the safe delivery of potable water and the collection/disposal of wastewater effluent and residue for the Hamlet of Rankin Inlet.
- Ensuring regulatory compliance to Wastewater Regulations of Indigenous and Northern Affairs Canada (AANDC) and the Government of Canada Fisheries Act as administered by the Department of Fisheries and Oceans (DFO).

# KNOWLEDGE, SKILLS AND ABILITIES Describe the level of knowledge, experience and abilities that are required for satisfactory job performance.

- Broad knowledge of engineering concepts with regard to water and sewer systems.
- Knowledge of the operation and maintenance of boilers and HVAC equipment and systems.
- Ability to comprehend unique technical problems and provide timely and effective solutions.
- Ability to supervise and assist technical staff daily in the operation, maintenance and repair of an utilidor system.
- Ability to prepare and implement schedules, budgets and costing procedures associated with the utilidor system.
- Ability to manage contracts and liaison with contractors and consultants.
- In-depth knowledge of hydraulics, water supply and treatment, sewage collection systems and treatment facilities.
- Ability to evaluate data for system verification and maintenance requirements.
- Financial management and coordinating skills.
- Ability to negotiate in-depth service agreements.
- Certification in Water Treatment/Distribution and Wastewater Collection/Treatment and maintain licensing credentials throughout term of employment.
- Knowledge of Health and Safety Act and regulations.
- This is a position of Trust and a satisfactory Criminal Records Check is required.

#### These skills are normally acquired through:

- Current Qualification as a Water and Waste Technologist (3 year diploma) or Mechanical Engineering Technologist (2 year diploma) with completed supplementary specialized courses or Mechanical Engineering Technologist and be willing to obtain Water and Waste Certification within 24 months of obtaining position.
- Five years direct experience in the area of Water Supply and/or Waste Disposal.

### 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 occurrence of physical demands, environmental conditions, and demands on one's senses and mental demands.

#### **Physical Demands**

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

- Climbing ladders and entering confined spaces will be encountered on a weekly basis.
- Carrying equipment and performing tests that require a level of physical strength is required.
- Travel by foot in harsh climatic conditions, such as deep snow, icy roads and wet muddy areas are a normal occurrence. This combined with cold and high winds may make a short walk very dangerous.
- Incumbent is required to work outside during winter months.
- Inspection duties will require that construction sites be visited and hazards inherent in such sites must be recognized along with the proper procedures followed for safe site visits.
- During new construction inspection phases the employee may be required to inspect in crawlspaces or confined space areas.

#### **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 disrupt regular work schedules and travel requirements.

- Climatic conditions can vary, and extreme cold and wind conditions may have to be taken into consideration when visiting communities.
- While performing inspections the incumbent may be required to spend lengthy period of times outdoors in extreme cold weather conditions.
- Toxic fumes, hazardous chemicals, hazardous materials maybe encountered at any inspection site.
- Loud noises, heavy equipment and other hazards are frequently encountered.
- Insects, dogs and other dangerous animals may be encountered.

#### **Sensory Demands**

Indicate the nature of demands on the jobholder's senses to make judgements through touch, smell, sight and hearing, and judge speed and accuracy.

- Loud noises on sites may make hearing difficult.
- Extreme cold and wind-chill require inspectors to wear many layers of clothing, which may make movement difficult, inhibiting the use of some tools and requires that extra precautions be taken to prevent frostbite when handling metal objects.

#### **Mental Demands**

#### Indicate conditions that may lead to mental or emotional fatigue.

- The community may exert considerable pressure on the incumbent and he/she is one of the few technically trained people and is in control of extensive government inventory.
- On a daily basis the incumbent must deal with contractors and the public in a regulatory and enforcement manner, where at times confrontational situations may develop resulting in high levels of stress.
- Decisions made in enforcing the Codes and Regulations may have a serious impact financially on contractors and building owners. This may lead to confrontations that are threatening and the possibility of physical and verbal threats are frequent.
- Orders given may impact on individuals that have no direct involvement in the situations and may cause stress.
- There is mental stress associated with meeting difficult schedules, extreme weather conditions, and remoteness of project sites, meeting shipping dates, and changing political direction on projects. Failing to complete a repair in extreme weather conditions could cause major failure and disruption of water/sewer services to residents of Rankin Inlet.

#### 7. CERTIFICATION

	FACILITIES MANAGER
Employee Signature	Supervisor Title
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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 outlin Attached organizational structure.	ned herein within the context of the

### 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".