1. IDENTIFICATION

<table>
<thead>
<tr>
<th>Position No.</th>
<th>Job Title</th>
<th>Supervisor’s Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>10-10852</td>
<td>RADIOLOGY TECHNOLOGIST</td>
<td>Manager Medical Technology Systems 10-11143</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Department</th>
<th>Division/Region</th>
<th>Community</th>
<th>Location</th>
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</thead>
<tbody>
<tr>
<td>Health</td>
<td>Radiology Services / Kivalliq</td>
<td>Rankin Inlet</td>
<td>Kivalliq Health Center</td>
</tr>
</tbody>
</table>

Fin. Code: 10643-01-3-320-100000-01-1000

2. PURPOSE

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

Under the supervision of the Manager of Medical Technology Systems, the Medical Radiation Technologist:

As a primary role, provides the service of the Radiography program with adherence to the Code of Ethics and the Standards of Practice of the Canadian Association of Medical Radiation Technologists (CAMRT) and the Canadian Association of Radiologists (CAR). This requires the expertise to fulfill all the important skills sets such as positioning, quality assurance and quality control for film and processing requirements, equipment and processor maintenance.

Provides general radiological responsibilities including some specialized fluoroscopy studies such as hysterosalpingograms and voiding cystourethograms. These performed as well with adherence to the Code of Ethics and the Standard of Practice of the Canadian Association of Medical Radiation Technologists (CAMRT) and the Canadian Association of Radiologists (CAR).

As required, provides, holter monitor, and electrocardiogram services.

Produces quality images for the referring physician to view and the radiologist to report, in a safe and efficient manner employing the ALARA (as low as reasonably achieved) principle for timely diagnosis and treatment of patients.

Performs general darkroom functions.

Performs clerical work associated with the Radiology Services Department.

Assists with the basic maintenance of the general radiological, processing and ECG equipment.

Assists in the planning and performance of radiology clinics.

Participates in in-house education.

Works collaboratively with, provides guidance and supports the role of the Radiology Assistant within the Radiology Services Department.

Is available as a resource to the nurses and radiology workers in the Community Health Centres within the Kivalliq Region.
3. SCOPE

<table>
<thead>
<tr>
<th>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?</th>
</tr>
</thead>
<tbody>
<tr>
<td>This position is located at the Kivalliq Health Center in Rankin Inlet, Nunavut, serving a population of ~2,800 locally as well as 7 outlying communities with a catchment population of ~11,000.</td>
</tr>
<tr>
<td>Reporting to the Manager of Medical Technology Systems, the Medical Radiation Technologist is part of a 2 member team, instrumental in providing services to the Kivalliq Health Center and the Kivalliq Region.</td>
</tr>
<tr>
<td>The scope of this position fulfills all general radiology and fluoroscopy requirements, in the absence of an on site radiologist, by using a variety of equipment. The Medical Radiation Technologist will be required to perform specialized diagnostic radiological exams, holter monitor setup, and electrocardiogram services to patients at the Kivalliq Health Center.</td>
</tr>
<tr>
<td>The incumbent consults with the ordering providers as well as providing radiological technical expertise and support to the nursing and support staff in the outlying communities.</td>
</tr>
<tr>
<td>The incumbent must be able to utilize different imaging modalities and processing equipment.</td>
</tr>
<tr>
<td>Quality Assurance and regular equipment maintenance is performed in the department on a regular basis on general radiological and ECG equipment.</td>
</tr>
<tr>
<td>This position impacts on the excellence of patient care, treatment and diagnosis provided by the health care team.</td>
</tr>
<tr>
<td>Due to the remoteness of the Kivalliq Health Center from major referral centres, the incumbent must have a thorough and comprehensive understanding of Radiology (including Fluoroscopy), ECG and holter monitor equipment plus equipment maintenance and repair.</td>
</tr>
<tr>
<td>These services are provided Monday to Friday from 08:30-17:00 hours. Services required after regular working hours and during the weekends are covered on an “on-call” (standby) basis shared by the Medical Radiation Technologist and the Radiology Assistant.</td>
</tr>
</tbody>
</table>

4. RESPONSIBILITIES

<table>
<thead>
<tr>
<th>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.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production of Radiographs:</td>
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<tr>
<td>The Medical Radiation Technologist:</td>
</tr>
<tr>
<td>- Produces quality radiographic images in accordance with Safety Code 20A and Safety Code 33 of the Radiation Protection Bureau of Health Canada, the Code of Ethics and Standards of Practice of the CAMRT (Canadian Association of Medical Radiation Technologists) and of the CAR (Canadian Association of Radiologists).</td>
</tr>
<tr>
<td>- Prepares the treatment area by positioning the x-ray tube, setting the appropriate exposure factors and gathering the necessary supplies, prior to performing the x-ray examinations requested by ordering providers.</td>
</tr>
<tr>
<td>- Interviews patient/client for present and previous pertinent medical history.</td>
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</tbody>
</table>
- Explains the procedure to the patient/client and make the patient/client feel at ease.
- Instructs the patient on all the required positions for the requested examination in accordance with the Radiology Procedure Manual.
- Is adaptable and flexible in the required routines according to the patient's capabilities.
- Selects the exposure factors appropriate to the examination.
- Administers the radiation exposure.
- Takes the initiative to provide special or added views necessary to aid in the diagnosis, without the direction of an on-site radiologist.
- Documents film for radiologists.
- Prepares and sends films out to the radiologist for interpretation.
- Consults with the ordering provider or the Doctor/Nurse on-call regarding unexpected atypical findings.
- Ensures that the radiographs meet all medico-legal requirements.
- Notifies physician/nursing staff immediately, if a patient's pathological or traumatic condition requires immediate medical attention or if continuing the procedure jeopardizes everyone's safety.
- Provides radiological services to other areas in the hospital, i.e. by using a portable x-ray machine in the ER, Inpatient Unit or the morgue as required.
- Assists visiting Radiologists, in specialized radiological procedures, i.e. setting up the treatment area, preparing contrast media, syringes, etc., to be used in the procedure, assisting in setting up sterilized trays, changing films during fluoroscopy.
- Assisting the physicians during specialized procedures such as Hysterosalpingogram, Voiding Cystourethrogram or other exams, by setting up the treatment area, preparing contrast media, syringes, etc., to be used in the procedure, assisting in setting up sterilized trays, and in the absence of an on-site Radiologist performing the fluoroscopy study.
- Performs special diagnostic procedures in accordance with the protocols regarding Contrast Media and the proper response to possible adverse reactions to ensure patient safety. Maintains sterile techniques throughout the procedure as required.
- Selects, prepares and draws up the appropriate amount of contrast media using sterile techniques.
- Documents and prepares for adverse reactions; if occurrence, calls the medical staff STAT.
- Ensures a physician injects the contrast and remains nearby for a minimum of 15 minutes post injection. Completes an incident report, if a reaction occurs, documenting all possible risks within the department or with any procedural routines.
- Follows universal precautions for isolation cases.
- Maintains the equipment and reports any malfunctions to the Manager of Medical Technologist Systems.
- Completes required forms and immediately reports all incidents and any known possible risks to the Manager of Medical Technology Systems.
- Maintains equipment in safe and operative condition, reporting any malfunction to the Manager of Medical Technology Systems and the Biomedical Technologist.
- Recommends possible changes or additions to departmental policy and procedures manual.
- Assumes the responsibilities of manager in his/her absence, as requested.
- Works a rotational standby schedule, outside of regular hours of work, with equal sharing of statutory holiday coverage.

**Radiation Protection:**
The Technologist must be knowledgeable of and consistently make use of good radiation protection methods and techniques. By doing so she/he ensures adequate protection for himself/herself, for the patient/client and his/her family and for the public. To perform this function, the technologist must:
- Determine the possibility of pregnancy in women of child bearing age and inform the physician before performing the requested procedure if the patient/client is pregnant.
- Utilize radiation protection methods, devices and most cautious techniques. When possible, choose appropriate exposure factors (e.g. high KVP) to decrease entrance does.
- Use the ALARA Principle (As Low As Reasonable Achievable) radiation exposure.
- Demonstrates compliance with all safety standards set up by the Radiation Protection Bureau in Ottawa to guarantee the safety of all patients and staff attending to or working in the department.
- Wears a radiation film badge which is sent to Ottawa every three months to be read determining
the amount of radiation received.

**Patient Care:**
The Technologist:
- Must be sensitive to cross-cultural differences, communicate effectively and be able to detect subtle changes in the patients’ condition.
- Must be able to work well under pressure and react quickly in an emergency situation. To do this function, the technologist must ensure patient rights are preserved and attempt to fulfill the patients needs as much as possible.
- Communicates with the patient, to determine the possibility of pregnancy whether the patient followed the preparation instructions necessary for the x-ray and to ensure that patient understands the procedure.
- Must safely handle critically ill patients and request help from other members of the healthcare team as necessary.
- Collaborates with nursing and other health care professionals as necessary.
- Assists patient on and off of the imaging tables.
- Informs the patients or nursing staff of any post procedure instructions and care.
- Recognizes a patient in distress or in an emergency situation-know the emergency protocols of the hospital and initiate appropriately.
- Provide basic first aid and CPR as required.
- Helps administer oxygen and medications as necessary.
- Ensures that restraints and immobilization devices are used properly and only in the appropriate situations and circumstances.
- Documents incidents, reactions and medications given.

**Community Health Centre Resource:**
The Technologist:
- Advises the radiology assistant and/or nursing staff, in the Community Health Centres on x-ray procedures by phone when necessary.
- Orientates the Community health Centre nursing staff within the Kivalliq Region with a basic knowledge of x-ray procedures and functions, developing film, and radiation protection measures, by explaining the use and function of radiology equipment and examinations.
- Provides radiographic resource to staff and quality assurance tests on community x-ray equipment when visiting the community.

**ECG, Holter Monitor and Cardiac Event Recorder:**
- Performs and records ECG’s, Holter Monitor and Cardiac Event Recorder studies as required by Medical Staff, in the x-ray department or wherever required.
- Sends out Holter Monitor and downloads Cardiac Event recorder for reading, to the cardiologist, upon return from the patient.
- Downloads EKG’s weekly to the cardiologist for reading.

**Quality Assurance:**
As the only Medical Radiation Technologist at the Kivalliq Health Center, the Technologist must actively take the lead role and participate in the departmental quality assurance program. To perform this duty, the Technologist must be able to:
- Analyze, rejects or repeat films and rates and document.
- Monitor, graph and analyze processor sensitometer strips and document.
- Troubleshoot radiographic and processing equipment.
- Perform examination audits (monitor volume and critical indicators).
- Perform image audits and Health Centre film critique audits.
- Perform film screen contact tests.
- Perform safelight tests.
- Perform lead apron shielding tests with fluoroscopy.

**Office/Administrative Responsibilities:**
When not busy with a patient, the Technologist assists in clerical work associated with the Diagnostic Imaging Department by:

- Updating patient’s files.
- Records examinations.
- Processing x-ray films from outlying communities.
- Arranging for film to be couriered to radiologists at designated referral centers in the most efficient manner possible when physicians require an urgent report.
- Preparing films, including previous applicable films to be transported to radiologists at designated referral centers twice a week.
- Distributing reports to ordering providers.
- Filing films along with official reports upon receipt from the radiologists.
- Upon request from ordering provider, take digital picture of films and burn to CD for the provider.
- Arranging for films to be sent to Health Facilities in the South as requested by patient’s physicians.
- Receiving and sorting mail.
- Purging patient’s files as necessary.

**Processing Radiographs:**

- Cleaning of cassettes and refilling the cassette with film.
- Refilling the film bin with the appropriate films, as required.
- Ordering the supplies for the darkroom and department.
- Mixing replenishing developer/fixer solutions and documenting the date replenished.
- Cleaning the automatic processor on a regular basis.
- Monitor graphing and analyzing processing sensitometer strips.

- Other duties as assigned and required by the Manager of Medical Technology Systems.

### 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.**

A diagnostic Imaging Department with no on-site Radiologist places great demands on the ability of the individual to work independently and provide expertise beyond the normal scope of duties. The technologist must be able to work unsupervised, use independent judgement, ingenuity and initiative and have:

- Knowledge of the CAMRT and CAR standards of practice.
- The ability to safely and efficiently operate the radiographic, fluoroscopic and portable x-ray units as required, to produce quality radiographs for the purpose of interpretation by a radiologist for diagnosis to aid in the client’s treatment.
- Knowledge to perform ECG and holter monitor studies.
- Knowledge of film critique, general duty radiology, special procedures, pathology and medical terminology.
- Knowledge of processor maintenance for general duty radiology, dark room use, and storage of toxic chemicals with preventative measures.
- Knowledge of radiation hazards and ensures the department’s practice of radiation safety precautions is adhered to.
- The ability to communicate effectively in both verbal and written format, with medical or non-medical personnel and all clients, in order, to contribute to the effective and efficient operation of the Radiology Services Department.
- The ability to function as a contributing member of the multi-disciplinary team as well as independently, due to the requirement of working on an “on-call” basis after regular working hours and in the absence of an on-site radiologist.
The ability to use good judgement in making quick and correct decisions in a professional manner, especially during emergency situations or when dealing with difficult or distraught clients, is a necessary requirement as there is no radiologist on site.

The ability to recognize atypical findings and initiate the appropriate action (contact the ordering provider, nurse on-call or attending physician immediately). Failure to do so, directly impacts upon the care, treatment and ultimate morbidity of the patient.

Must have or be willing to obtain CAMRT continuing education credits to maintain accreditation standards.

Must be sensitive to patient’s/client’s different needs and use independent judgement in view of the fact that there is no radiologist on-site.

Knowledge of and practice safety precautions when lifting and moving heavy patients and equipment.

This level of knowledge is acquired by:

- Successful completion of a 3 year accredited and recognized college program in the discipline of medical radiological technology OR
- Successful complete of a degree in medical radiation technology
- Minimum of 2 years experience as a Medical Radiation Technologist

The Technologist must be a current registered member in good standing with the CAMRT (Canadian Association of Medical Radiation Technology).

The incumbent will be required to complete annual certification in CPR and WHIMS.

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).

Physical Demands

<table>
<thead>
<tr>
<th>Indicate the nature of physical demands and the frequency and duration of occurrences leading to physical fatigue or physical stress.</th>
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</thead>
<tbody>
<tr>
<td>- Lifting and positioning of clients of all sizes. Everyday periodically throughout the day.</td>
</tr>
<tr>
<td>- Pushing and manoeuvring a heavy mobile unit - 3-4 times/week, more frequently when travelling to communities.</td>
</tr>
<tr>
<td>- Working with ergonomically incorrect equipment.—Daily.</td>
</tr>
<tr>
<td>- Carrying heavy cassettes and files. Daily 7.5 hours per day.</td>
</tr>
<tr>
<td>- Wearing of a lead apron periodically throughout the 7.5 hour day.</td>
</tr>
<tr>
<td>- Standing and walking on hard floors 7.5 hours/day.</td>
</tr>
<tr>
<td>- Bending and lifting files, stock and storage of same-everyday periodically throughout the day.</td>
</tr>
<tr>
<td>- Position requires “on call” services, after regular department scheduled hours during the week and on week-ends. Rotational call shared with the Radiology Assistant. Occurs more frequently when other staff are on vacation or days off.</td>
</tr>
<tr>
<td>- Recall to work at any time, for various lengths of time and as often as deemed necessary by the physician on call.</td>
</tr>
<tr>
<td>- Sleep disruption and sleep deprivation. Must report to work on time for regularly scheduled shifts even when on call. Rotational call shared with Radiology Assistant. Occurs more frequently when other staff is on vacation or days off.</td>
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</table>
### 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.

- Continuous risk of exposure to infectious diseases-ongoing.
- Possible injury from disturbed patients-occasionally.
- Periodic exposure to toxic chemicals, e.g., when replenishing processor chemicals, which could be a possible contributing factor to darkroom disease in some individuals-daily.
- Patient/staff safety re: regular exposure to ionizing radiation-periodically when patient restraint is needed.
- Constant exposure to other forms of radiation, e.g., computer screens-daily 3-5 hours.
- Travelling in small airplane to remote community.
- Encountering weather conditions while travelling, the Technologist may encounter travel delays impacting family life-occasionally.

### 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.

- Constant exposure to equipment noise-daily 7.5 hours.
- Periodic exposure to toxic fumes from chemicals, possibly causing headaches, asthma, etc.-Daily.
- Potential for eyestrain due to working in a dimly lit room and darkroom-daily/occasionally.
- Exposure to trauma-occasionally.
- Exposure to violent and or intoxicated patients-occasionally.

### 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.

- Increased responsibility results from working in a remote area without a radiologist on site. The technologist may periodically be called and consulted by ordering providers around patient diagnosis-daily 2-3 occurrences.
- Share “on-call” duty. Rotational call shared with Radiology Assistant. Occurs more frequently when staff are on vacation or days off.
- Exposure to emotionally difficult situations (trauma or death)-occasionally.
- Dealing with patient anxiety-daily.
- Performing very personal examinations-daily.
- Occasionally, sleep disruption and sleep deprivation may occur. The incumbent is expected to behave in a cheerful, exact and professional manner at all times. Rotational call shared with Radiology Assistant. Occurs more frequently when staff are on vacation or days off.
- Must be able to think ahead and anticipate problems-constantly.
- Impact on family life due to travelling and when on call, while providing radiological services. Rotational call shared with Radiology Assistant. Occurs more frequently when staff are on vacation or days off.
- Lack of control over work pace-high service demand-daily.

### 7. CERTIFICATION
<table>
<thead>
<tr>
<th>Employee Signature</th>
<th>Supervisor Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Printed Name</td>
<td>Supervisor Signature</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date:</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>I certify that I have read and understand the responsibilities assigned to this position.</td>
<td>I certify that this job description is an accurate description of the responsibilities assigned to the position.</td>
</tr>
</tbody>
</table>

Deputy Head Signature

<table>
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<tr>
<th>Date</th>
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</thead>
<tbody>
<tr>
<td>I approve the delegation of the responsibilities outlined herein within the context of the attached organizational structure.</td>
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</tbody>
</table>

### 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.”