



## **IDENTIFICATION**

<b>Department</b>	<b>Position Title</b>	
Infrastructure	Heavy Equipment Mechanic, Marine	
<b>Position Number</b>	<b>Community</b>	<b>Division/Region</b>
33-13121	Inuvik	Beaufort Delta

## **PURPOSE OF THE POSITION**

The Heavy Equipment Mechanic - Marine (Marine HEM) is a technical expert and contributes to the safe and reliable operation of the Department of Infrastructure of all heavy and light mobile equipment, marine vessels, and fixed equipment that is used for maintaining the Department's assets.

All light and heavy equipment is maintained, repaired, or reconditioned in a timely, dependable, and orderly manner in accordance with the manufacturer's specifications and departmental policies and procedures.

## **SCOPE**

The Department of Infrastructure (INF) delivers its programs and services through a highly decentralized model and is responsible for a wide range of territory-wide government functions. These include the operation and maintenance of public buildings and transportation infrastructure and systems; project management; facilities planning; design and technical support services; property management; disposal of surplus property and goods; motor vehicle and mechanical and electrical regulatory services; and fleet management.

INF is also responsible for energy-related programming aimed at increasing the use of domestic energy resources, reducing energy costs across the Northwest Territories, delivering renewable energy solutions, providing energy supply services to non-market communities, and leading efforts in energy conservation and efficiency.

On behalf of the GNWT, the Department additionally leads long-term strategic planning for investments in public transportation systems and energy production and distribution



infrastructure and ensures the continuity of marine transportation services that support the delivery of fuel and dry goods to northern communities.

Located in Inuvik and reporting to the Marine Manager, the Marine HEM's time will be divided between the Inuvik repair facilities and the Beaufort Delta ferry locations, including the Mackenzie River Ferry camp and the Peel River Ferry. The Marine HEM implements a planned service, maintenance, and repair program for all heavy and light equipment utilized in the Beaufort Delta Region to provide maximum equipment availability, operating at their optimum capability.

This position travels extensively within the Beaufort Delta region and works regular hours plus overtime.

## **RESPONSIBILITIES**

### **1. Plan, organize and implement the maintenance program for the marine mobile equipment and stationary power units.**

- Ensures preventive maintenance system inventory is accurate for all heavy and light equipment and stationary power units.
- Reviews preventive maintenance system schedule annually and ensures all maintenance is scheduled in accordance with the requirements of the manufacturer and the Department.
- Completes all records associated with preventive maintenance system and maintains accurate history files for each asset.
- Orders annual petroleum and filter supplies necessary to perform scheduled preventive maintenance tasks.

### **2. Service and repair mobile equipment, marine equipment, and stationary power units as required and in accordance with maintenance schedules.**

- Services heavy equipment, marine vessels, light vehicles, and stationary power units in accordance with the preventive maintenance program and manufacturers requirements.
- Carries out fault diagnoses to determine the cause of vehicle or unit failure.
- Replaces and restores faulty and defective components and sub-component parts.
- Carries out emergency repairs and makes alternative arrangements in response to equipment failures, to minimize the impact on airport operations.
- Ensures work orders and service requests are completed correctly by implementing work programs and adhering to approved methods, procedures, and acceptance criteria.
- Establish operation and maintenance costs and capital costs of new systems, equipment and installations.



- 3. Manage a planned maintenance program by carrying out major overhauls to mobile equipment and stationary power units.**
  - Diagnoses faults in components and determines restoration requirements.
  - Dismantles, refurbishes, replaces and reassembles components to original specifications.
  - Cleans and paints equipment as required.
  - Tests mobile equipment and stationary power units.
  
- 4. Maintain associated records and implement approved standards and practices.**
  - Completes work orders and identify parts and supplies used.
  - Records and reports defects and potential for equipment and power unit failures to the Manager.
  - Recommends and prepares requisitions for parts and materials.
  - Completes parts and materials stock control records.
  - Maintains accurate vehicle and vessel history files, including fuel consumption, usage, and maintenance performed.
  - Maintains an accurate inventory for all GNWT-provided tools, mobile equipment, and other assets as necessary.
  - Prepares and administers maintenance contracts, inspects completed work, and recommends payment of invoices.
  - Arranges travel and completes associated travel documents when scheduling repairs to community equipment.
  - Completes condition reports based on experience and knowledge and makes recommendations for repair or replacement to the Marine Manager. Replacement costs of mobile equipment range from \$1,000 to \$500,000.
  
- 5. Provide support functions.**
  - Maintains a safe and orderly work environment.
  - Supports the marine vessel refit program, working with the Marine Manager in the planning of refit tasks
  - Coordinates scheduled maintenance of marine equipment and the ordering of materials and supplies.
  - Assists in snow removal or ice control duties.
  - Supervises and trains apprentices and casual staff as required.
  - Provides mechanical support and operational assistance at remote sites, as and when required.
  - Assists other operational and tradespeople, as required.
  - Provides support in emergency situations, as directed.
  - Performs duties such as welding, brazing and soldering.



## **6. Care and maintenance of supplied service vehicle, tools, and repair equipment.**

- Ensures service vehicles, tools, and repair equipment are maintained in accordance with safety standards and manufacturer requirements.

### **WORKING CONDITIONS**

#### **Physical Demands**

All duties require some level of physical effort. Most include strenuous physical effort for the full duration of the workday. The effort would include heavy lifting, stretching, reaching, operation of tools and other heavy equipment. Both upper and lower body physical strength and agility are required.

#### **Environmental Conditions**

Although most of the duties are conducted within a heated and ventilated workshop, there will be some requirements to conduct these duties in the field, outdoors, in extreme summer and winter weather conditions, and in remote locations. All duties will include exposure to fumes, fuels, oils, lubricants, other solvents, and somewhat dangerous or hazardous working conditions. Some travel in small airplanes.

#### **Sensory Demands**

Four key senses are developed in all duties to investigate and determine the nature of problems in equipment servicing and repair. Attention of all senses, in particular hearing, sight, and smell, must be paid during the course of the work, to ensure the safety of the Marine HEM and co-workers.

#### **Mental Demands**

Demands for equipment use, especially during inclement weather periods, may cause rescheduling and changes to plans made by the Marine HEM for servicing and repair.

### **KNOWLEDGE, SKILLS AND ABILITIES**

- Knowledge of equipment ranging from heavy and light mobile equipment to stationary systems, including generator sets.
- Knowledge of standard repair methods, tools, equipment and techniques.
- Knowledge and experience on motor graders, highway trucks, tractors, loaders and crawler tractors and marine vessels.
- Ability to locate and diagnose mechanical problems.
- Ability to interpret diagrams and specifications.
- Teaching, supervisory and communication skills to train apprentice mechanics.
- Time management and organization skills to estimate resource requirements for repairs and to complete the necessary shop repair orders and condition reports.



- Ability to prioritize work based on operational demand and decision-making ability.
- Verbal communication skills to relay information on equipment repair/service requirements.
- Written communication skills to complete estimates, shop repair orders, condition reports and other paperwork associated with equipment service and repair.
- Ability to provide maintenance instructions on newly repaired equipment to operators.
- 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:**

Journeyman Heavy Equipment Certification with six months of experience.

Equivalent combinations of education and experience will be considered.

**ADDITIONAL REQUIREMENTS**

Class 3 Driver's License with air brake endorsement within three months of hire.

**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