

TRADESPERSON III - CERTIFIED PUMP MECHANIC
Storm & Wastewater Section

DEFINITION

This is tradesperson work at the journeyman level requiring skill and ability the application of maintenance and repair procedures for wastewater facilities. The Tradesperson III is expected to exercise considerable independent judgement in all phases of the work. Duties include small engine repair, electrical troubleshooting, welding, fabricating, pipefitting and mechanical repairs pertaining to sewer lift stations. The work also includes design input and construction supervision for new wastewater facilities.

ILLUSTRATIVE DUTIES AND RESPONSIBILITIES:

- Plans, organizes and performs maintenance and repairs on a variety of pumps, valves and motors.
- Supervises other trades in the daily inspection, maintenance and repairs of sewer lift stations and structures.
- Performs preventative maintenance requirements, establishes schedules and carries out maintenance as directed or required.
- Conducts tests, determine causes of malfunctions and provides estimates to complete repairs as required.
- Performs repairs to pumps, valves, generators and all other station equipment.
- Maintains a written inventory of equipment and repairs completed.
- Orders and maintains parts inventory for all Pump Station equipment
- Supervises and/or completes Upgrades and replacement of lift stations as required.
- Maintains small tools as required (ie: chain saws, cut off saws, tampers).
- Installs and maintains piping and appurtenances.
- Installs and maintains flow monitoring equipment and related computer software
- Uses computer based SCADA system to monitor pump stations
- Trains and certifies staff in Confined Space Entry Procedures
- Performs other related duties as required.

KNOWLEDGE, SKILLS AND ABILITIES ON THE JOB:

- Thorough knowledge of the methods and techniques and the use of materials, tools and equipment of the applicable trade.
- Knowledge of flow monitoring and SCADA Programs
- Extensive knowledge of WCB regulations, WHIMIS and Operating Safety Procedures
- Ability to perform a variety of skilled manual tasks requiring the use of effective independent judgement.
- Ability to read and interpret plans, schematics and blueprints.
- Ability to communicate effectively in writing.
- Knowledge of the rules and precautions necessary to prevent and avoid accidents in and around municipal facilities and equipment.
- Ability to train others in the applicable trade as required.
- Knowledge of pollution regulations and reporting (PEP).
- Ability to keep records and data related to pump station maintenance and operation.
- Thorough knowledge of the rules, bylaws, federal and provincial regulations governing the applicable trade.
- A thorough knowledge of Workers' Compensation Board Regulations - ie: confined space entry and shoring.
- A willingness to attend in-service training programs offered at Saanich or other authorized

agencies.

- Demonstrates Saanich Core Competencies as they relate to this position (see all behaviour statements)
 - Adaptability - willingness to be flexible in a changing work environment
 - Relationship Building - establishes and maintains respectful and cooperative working relationships.
 - Effective Communications - communicates effectively with others.
 - Problem Solving - recognizes and acts to resolve problems.
 - Customer Focus - provides excellent service to both internal and external customers.

Training and experience in the following areas:

Pumps

1. Bearings, seals and packing.
2. Shaft Alignments.
3. Pump drives and speeds.
4. Impeller and volute maintenance, installation and repair.

Piping

1. Check Valves.
2. Electrolysis.
3. By-pass piping.
4. Various filtration systems.
5. Various classes, types and uses of pipes and couplings.

Sewage Systems

1. Pumps and lift stations.
2. Applied hydraulics.
3. Backflow prevention.
4. Flow measuring devices and recorders.
5. Metering.
6. Computer operation; understanding of SCADA.
7. Video analysis and interruption.
8. Wetwell level sensor, ultrasonic and floats.

Mechanical

1. Engine and pump identification.
2. Diesel and gas engines.
3. Fuel systems including turbo charging.
4. Lubrication requirements.
5. Couplings.
6. Complete engine rebuilding.
7. Understanding of machining procedures.

Electrical

1. Working knowledge of electrical systems and controls

REQUIREMENTS:

- Completion of Grade 12.
- EOCP Level 2 Wastewater Collection Certification.
- Supervisory training and experience.
- Possession of a valid B.C. driver's licence.
- Possession of a Trades Qualification Certificate or certificate of apprenticeship in heavy duty mechanics and/or mechanics and/or millwrighting, or a combination of equal knowledge, experience and training.
- A minimum of five years experience or a combination of experience and training in work directly related to sewer and lift stations.
- Fit to perform work in all weather conditions and work while in close proximity or in actual contact with raw sewage.
- Successful completion of a Pump maintenance course and/or equivalent experience.
- Possession of a Certificate of Attendance from a vocational/technical school for oxygen acetylene, ARC and MIG welding and/or equivalent experience.

STANDARDS:

- Support and uphold the established policies and objectives of the Municipality and the Division in all areas of activity.
- Will not release or discuss non-routine municipal or departmental business without prior authorization.
- Adhere to all established municipal and departmental rules and regulations.
- Maintain the performance levels set by the Division in the execution of all duties and responsibilities.
- Maintain a cooperative working relationship with employees, management, Council and the public.
- Maintain regular communication with the supervisors, keeping them fully informed of all non-routine, urgent and/or controversial matters.
- Shall not receive or solicit a subscription, gratuity, or fee for or in conjunction with any service or presumed service performed by him/her as an employee.
- Uphold the Municipal Safety Policy; promote, monitor and ensure compliance of Workers' Compensation Board Regulations within the workplace.