

CITY OF CHEHALIS POSITION DESCRIPTION

Class Title: **Maintenance Technician – Electrical, Electronics & Equipment**
Department: Public Works

FLSA Status: Non-exempt
Union Status: Represented
Updated: October 2013

*Position descriptions are intended to present a descriptive list of the range of duties performed by employees in the class. Descriptions are **not** intended to reflect all duties performed within the job.*

NATURE OF POSITION:

This position performs highly skilled and specialized mechanical, electrical and electronic technical work for the installation, maintenance, repair and operation of Public Works equipment, machinery, electrical and instrumentation systems. Tasks range from minor routine servicing of equipment, both mechanical and electrical, to major repairs.

Work requires making decisions as to the serviceability and adequacy of machinery and equipment (non-vehicle), recordkeeping and reporting.

SUPERVISION RECEIVED:

This position works under the general supervision of and reports to the Water or Wastewater Superintendent.

SUPERVISION EXERCISED

May act as a lead worker and give direction to temporary/seasonal staff as assigned or required.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

The following tasks are typical for positions in this classification. Any single position may not perform all of these tasks and/or may perform similar related tasks not listed here.

Performs major and minor repairs, inspections, testing, emergency and preventative maintenance and modifications/adjustments on control systems, electrical components, pumps, motors and other machinery and equipment of the wastewater and water systems and other facilities of the Public Works Department.

Installs, repairs, maintains and troubleshoots electrical (various industrial voltages) and electronic equipment, and telemetry equipment.

Operates, maintains and performs electrical and mechanical troubleshooting of machinery, equipment, HVAC systems, control systems and hydraulic and pneumatic systems. Installs, replaces, rebuilds or adjusts machinery and/or equipment components as required.

Installs, maintains, calibrates, programs and repairs computer based data acquisition and control systems, process control systems, programmable logic controllers and monitoring and instrumentation systems.

Maintains, troubleshoots, and repairs various communication and control systems such as device-net, ether-net, telemetry, radio, and fiber optics.

Performs programming and troubleshooting of computerized SCADA systems.

Performs predictive as well as preventative maintenance on all machinery, equipment, electronics and associated systems.

Performs fabrication and welding as required to repair or modify mechanical equipment.

Coordinates and facilitates minor to major electrical and mechanical repairs.

Participates in work involving confined space entry and/or rescue, including use of respirators and other specialty equipment.

Works with superintendent and operations staff to coordinate maintenance and repair schedules to minimize process disruptions

Provides technical recommendations to plan and budget for equipment and instrumentation maintenance, upgrades, modifications, and repairs.

Maintains detailed records on machinery, equipment, circuitry and control systems and works with computerized maintenance programs to record and track repair/maintenance information.

Successfully participates in and completes training and obtains and maintains certification and/or licensing and eligibility in:

- Commercial Vehicle Operations (maintains existing license)
- Washington State Certified Flagger (required as scheduled by the city)
- First Aid/CPR including bloodborne pathogens and use of AEDs (required as scheduled by the city)
- Confined Space Entry (required as scheduled by the city)
- Forklift Operations (required as scheduled by the city)

Performs all duties in conformance with appropriate safety and security standards.

Follows directions and implements or carries out written and/or oral instructions and assigned duties.

Works with coworkers or independently, often with limited supervision. Maintains productivity and self-motivation in accomplishing assigned tasks and duties.

OTHER DUTIES

Responds to emergencies and problems during and after normal working hours as needed, in a timely and efficient fashion, and may be required to be on call to respond to emergencies.

May be required to work weekends and before or after normal working hours.

Controls and guides traffic at work sites by flagging and implementing traffic control measures as required or assigned.

Operates various types of machinery, equipment, vehicles and power tools.

Travels within city and county, as well as out of town, which may include attending conferences, seminars, and training sessions.

And such other related tasks, duties and responsibilities as assigned.

REQUIRED QUALIFICATIONS

Education and Experience:

Graduation from accredited high school or GED equivalent; and

Associate's degree in industrial trades or two years technical school in industrial trades.

Minimum of five years of experience in maintenance of industrial electrical, electronic and mechanical equipment.

Minimum of five years of experience in wastewater and/or water equipment maintenance or related field(s) including experience with pumps, motors, hydraulics and associated controls.

In place of the above requirements, any combination of education and experience that provides the applicant with the required knowledge, skills and abilities to perform the job may be considered as qualifying.

Licenses, Certifications and Other Requirements

At time of appointment must possess a valid Washington State Drivers License and Class "B" Commercial Drivers License with good driving record.

Must be medically capable of performing required work while wearing a respirator. Finalists must successfully complete respirator medical screening prior to offer of employment.

Must successfully satisfy a background investigation.

Knowledge Of:

Extensive knowledge in the maintenance, repair, and testing of electrical circuitry, controls, telemetry, programmable logic controllers, computerized/electronic circuitry with knowledge of the instruments and frequently used electronic testing devices.

Extensive knowledge in the maintenance and repair of pumps, motors, compressors and other machinery and equipment associated with water and wastewater treatment plants and pump stations.

Instrumentation and controls including experience with variable frequency drives, programmable logic controllers and associated programming software and industrial communication protocols.

Water and wastewater treatment plants and associated pumping, pneumatic, hydraulic and electronic systems.

Skilled In:

Use and care of tools and equipment.

Utilizing computers to communicate with and troubleshoot instrumentation and control systems.

Utilizing PC computers with word processing and spreadsheet programs.

Driving and operating a variety of equipment under varying weather conditions.

Ability To:

Read, interpret and understand technical drawings, PIDs, operation and maintenance manuals, blueprints, schematics and as-builts including the ability to develop and maintain as-built drawings of mechanical, electrical, pneumatic and hydraulic systems.

Effectively communicate and interact with suppliers, engineers, technical support representatives, management, other employees, and the public regarding operation and maintenance issues.

Work independently and unsupervised.

Follow applicable safety rules and regulations and knowledge of occupational hazards and safety precautions associated with confined spaces, electrical circuitry and overhead lines associated with water/wastewater and street lighting work.

Use sound reasoning and judgment in the performance of job functions.

Fluently read, write and comprehend the English language, using proper grammar, spelling and punctuation.

Communicate detailed information and recommendations effectively, both orally and in writing.

Perform basic arithmetic computations and data entry functions accurately.

Meet the physical demands of the job and perform essential job functions.

Desired Skills and Abilities:

Possession of current First Aid/CPR certification.

Possession of current flagging card.

MACHINES, TOOLS AND EQUIPMENT USED IN PERFORMING ESSENTIAL JOB FUNCTIONS

The machines, tools and equipment described here are representative of, but not limited to, those that may be used by an employee to successfully perform the essential functions of the job.

Temperature sensing instruments, infrared circuit testing equipment, telemetry testing equipment, harmonics testing equipment, logic control tester/programmers, oscilloscope, hydraulic press, welder, multiple environment gas detector, volt/ohm/amp testers, current loop testing equipment, underground circuit locating equipment, computer, copy and fax machine and other office equipment, large pumps, generators, compressors, and pneumatic drills, breakers and tools, and various hand and power tools.

PHYSICAL DEMANDS:

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of the job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential job functions.

Stand or sit (stationary position); walk (move, traverse); use hands/fingers to handle or feel (operate, activate, use prepare, inspect place, detect, position); climb (stairs/ladders); balance (ascend/descend, work atop, traverse); stoop, bend, kneel, crouch or crawl; talk/hear (communicate, detect, converse with, discern, convey, express oneself, exchange information); see (detect, determine, perceive, identify, recognize, judge, observe, inspect, estimate, assess); taste/smell (detect, distinguish, determine); push or pull; reach; perform repetitive movements/motion; specific vision abilities include close, distance, color and peripheral vision, depth perception, and the ability to adjust focus; hand-eye coordination and manual dexterity is necessary to use tools and equipment, operate a computer keyboard

Heavy Work – exerting up to 100 pounds of force occasionally, and/or up to 50 pounds of force frequently, and/or up to 20 pounds of force constantly to move objects.

The employee may be required to wear a self-contained breathing apparatus and maintain respirator medical clearance under certain work conditions. This may require clean shaven or limited facial hair growth to meet State and Federal requirements for proper mask seal.

WORK ENVIRONMENT:

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

Exposure to Hazards and Atmospheric Conditions including:

- Household cleaning supplies and/or basic office supplies (eg. copy machine toner)
- Fumes
- Dust
- Extreme temperatures (hot and/or cold)
- Wet and/or excessive humidity
- Confined spaces
- Noise
- Vibration
- Mists or gases
- Mechanical hazards
- Biological hazards (sewage and related materials)
- Chemical hazards
- Electrical hazards
- Traffic and vehicle hazards
- Burn hazards
- Body fluids and/or other potential sources of bloodborne diseases

Duties are primarily performed at the water filtration plant, wastewater treatment plant, water pump stations and wastewater lift stations. On occasion work may take place at other public works or city facilities.

Work may be required indoors and outdoors. Work may require mobility under and on top of and around structures, and machinery and equipment. Work may take place on wet, loose, and/or uneven surfaces, and in some unpleasant situations including but not limited to unsanitary, wet and/or humid conditions. It may involve working in confined spaces, above the ground and in elevated locations.

Noise level in the work environment is generally moderately noisy to extremely noisy. On a regular basis, the noise level may be loud and hearing protection required.

The duties and responsibilities listed above are intended to be illustrative only of the type of work performed. The omission of other specific duties does not exclude them from the requirements of the position if they are similar, related or logical assignments to the position.

The position description does not constitute an employment agreement between the City and the employee and is subject to change by the City as its needs and the requirements of the job change.