



WASTEWATER MAINTENANCE SPECIALIST-MECHANICAL

Department: Planning and Public Works
Job Class #: 954100
Compensation Grade: Maintenance/Trades 39

FLSA: Non-Exempt
Represented: Yes

Classification descriptions are intended to present a descriptive list of the range of duties performed by employees in this class and are not intended to reflect all duties performed within the job.

GENERAL FUNCTION: This is highly skilled maintenance work involving preventative and corrective mechanical activities in the Planning and Public Works Department, Wastewater Treatment Plant and Collection System Operations. An employee in this class is responsible for the maintenance and repair of a wide range of mechanical equipment such as pumps, pipes, valves, screw augers, elevators, filter systems, combustion engines, shredders, grinders, blowers, chemical feed/filter systems and other complex machinery throughout the system. Work involves a continuous effort to troubleshoot and repair major wastewater processing devices, equipment or machinery.

SERIES CONCEPT: The Wastewater Maintenance Specialist – Mechanical is a maintenance position in the Wastewater Treatment Plant and Collection System Operations. This position is distinguished from the Wastewater Maintenance Technician by the journeyman status and is considered a highly skilled maintenance position.

ESSENTIAL FUNCTIONS:

- Perform regular checks on various machinery throughout the plant or collection system. Checks oil levels, conveyor belts for proper tension, drive belts for wear and cracks, chain drive links, sheaves and sprocket integrity and checks bearings for proper lubrication. Cleans gear boxes and where required, change oil filters.
- Perform safety checks on overhead cranes, cable collectors, railways and drum integrity. Removes or replaces work parts as required.
- Perform maintenance and ensures safety checks on various portable equipment such as emergency generators, compressors, and hydraulic pumping units.
- Prepare and initiate necessary work orders; schedule maintenance on a periodic basis; and write reports and purchase orders for parts and equipment.
- Initiate major overhaul of all types of pumps, meters, compressors, motors, gear boxes, chlorinators and major valve assemblies.
- Perform scheduled maintenance and repair work on shredders, lift and pump stations, grinders, blowers and related collection system equipment and machinery.
- Maintain and repair boilers by cleaning fire sides and linings; inspect safety equipment and related equipment to ensure proper operation.
- Uses gas, electric and heliarc welding systems, as needed, to cut, heat, braze or weld in the repair, construction or modification of plant equipment and systems.
- Perform fabrication work assignments to include milling, grinding and machining work.
- Review plan specifications, drawings and sketches of plant and/or sewer collections equipment or machinery.
- Perform general maintenance and repair on buildings, structures and grounds to include general carpentry, concrete repair and painting.

WASTEWATER MAINTENANCE SPECIALIST-MECHANICAL

Classification Description – Pierce County

Page 2

ESSENTIAL FUNCTIONS: (continued)

- Inspect piping systems for leaks and corrosion, replaces where required, design and install piping modifications, as directed, to include changes or expansion of fire sprinkler system or sewer collection system.
- Use and operate personal computer to record and input work order information.
- Use and operate a wide variety of hand and power tools, equipment, machinery and vehicles.
- Lead, train, provide direction and instruct other employees as required.
- Responsible for the efficient and safe operation of work crews in various treatment plant and/or collection field operations.
- Work in confined space, above or underground; lift or carry parts or equipment weighing more than 50 pounds; and work around hazardous fumes and loud noises.
- Operate a wide variety of plant or collection system vehicles and specialized equipment such as dump truck, fork lift, vacuum pump, vactor, backhoe, jet rodder, boom truck, pump units, televised sewer line inspection equipment and emergency generators.
- Work within an established Asset Management Program.
- Maintain regular, predicable and punctual attendance during regular scheduled work hours as assigned work site.
- Meet the travel requirements of the position.

OTHER JOB FUNCTIONS:

- Perform other job functions as assigned.

SUPERVISION RECEIVED AND EXERCISED: Work is performed under the general supervision of the Wastewater Maintenance Supervisor or designee who reviews the work through on-site inspection, participating in work and by overall evaluation of results obtained. The Wastewater Maintenance Specialist – Mechanical leads, trains, orientates and provides direction and assistance to other employees assigned to work at the plant or on the collection system.

WORK ENVIRONMENT: The work environment characteristics described herein are representative of those an employee encounters while performing the essential functions of the position. Work is performed around a variety of inside and outside environmental conditions, in tight and confined spaces, above and underground, is subject to loud noises and noxious fumes, and working around high voltage plant and collections equipment and machinery.

PHYSICAL REQUIREMENTS: The physical demands described herein are representative of those that must be met by an employee to successfully perform the essential functions. A position in this class is generally exposed to prolonged period of standing, bending, climbing, loud industrial noises, fumes, and gases, working in confined spaces, above and underground, use and operating a variety of hand/power tools, equipment, and machinery requiring finger and hand dexterity, observing equipment and machinery in order to ensure proper working conditions, working in the field or in a plant working environment in all types of weather conditions and using proper safety equipment and devices. Walking, sitting, climbing or descending ladders to a height or depth of one hundred feet and ability to enter tight and confined spaces with a diameter of twenty-four (24") inches, bending/stooping, pushing/pulling, reaching, unassisted lifting of 50 pounds is required, and working around traffic.

WASTEWATER MAINTENANCE SPECIALIST-MECHANICAL

Classification Description – Pierce County

Page 3

KNOWLEDGE, SKILLS, AND ABILITIES

Knowledge of:

- Standard practices, methods, tools, materials, equipment and machinery of the mechanical trades.
- Hydraulics, including principles of operation of all types of pumps, blowers, grinders, shredders, chemical feed/filter systems, lift stations and related factors affecting their performance.
- Safety practices and procedures related to the operational environment and maintenance of a large wastewater treatment facility and/or sewer collection system.
- Asset Management principles and practices.

Skill in:

- Use and operation of a wide assortment of hand/power tools, equipment and machinery.
- Use and operation of a personal computer, word processing and computerized maintenance management system software, GIS software and data entry equipment.

Ability to:

- Operate a threading machine, metal lathe, milling machine, grinder, table saw, drill press, welding equipment, T.V. inspection equipment and related machinery and diagnostic tools used in the maintenance and repair of equipment in a wastewater treatment plant or pumping facility.
- Visually and otherwise diagnose malfunctioning equipment and provide immediate corrective repair action.
- Read, interpret and understand as-built drawings and technical manuals.
- Design and create simple working drawings necessary to develop materials, lists, cost details and fabrication guidelines.
- Work in confined spaces, over and underground, around hazardous conditions, and lift or carry parts, equipment and materials weighing over 50 pounds.
- Prepare daily work order reports (including time, material and equipment usage information).
- Remove and replace parts as required.
- Drive and operate a wide variety of collection system and plant equipment, machinery and vehicles.
- Meet the travel requirements of the position.
- Maintain regular, predicable and punctual attendance during regular scheduled work hours at assigned work site.
- Willingness to respond to emergencies on a 24-hour basis and work varied shifts and hours.
- Physically perform the essential functions.

MINIMUM REQUIREMENTS TO APPLY: High school diploma or GED and two (2) years of apprenticeship training from a recognized vocational technical school or training program. A minimum of five (5) years of experience in the maintenance and repair of mechanical, pumping, or collection system is required. A combination of education/experience which clearly demonstrates ability to perform the duties of this classification may be substituted for education and formal training. A physical examination by a County-approved examiner may be required prior to appointment.

WASTEWATER MAINTENANCE SPECIALIST-MECHANICAL

Classification Description – Pierce County

Page 4

SPECIAL REQUIREMENTS AND/OR QUALIFICATIONS: Must have a valid Washington State Driver's License. Within the first twelve months, individuals must have the ability to obtain a Commercial Driver's License (CDL) Class "A" (Tank Vehicle) endorsement and Wastewater Collections Specialist Certification. Forklift Operation Certification, First Aid/CPR Training, Confined Space, and Electrical Safety Training and Traffic Control Certification is required within the first six months of employment. Wastewater Collections or Water Distribution Wastewater Operator 1 Certification, Water Distribution Certification, Washington State Herbicide Chemical Application License, NASSCO Pipeline Assembly Certification, Water Backflow Assembly or Electrical License (EL07) Certification are desired.