

CITY OF PULLMAN, WASHINGTON

CLASS SPECIFICATION

WASTEWATER TREATMENT PLANT MECHANIC

2403

GENERAL PURPOSE:

Performs a variety of skilled repair and maintenance tasks on pumps, electrical and electronic controls, and heating equipment.

CLASSIFICATION SUMMARY:

The Wastewater Treatment Plant Mechanic troubleshoots, repairs, maintains and replaces wastewater treatment plant equipment and systems. The incumbent plans and maintains the plant's preventative maintenance program. Work is performed according to standards of the plumbing and electrical trades and involves the use of blueprints, electronic schematic drawings, and manufacturer's installation/repair instructions. The Wastewater Treatment Plant Mechanic is primarily responsible for performing major repair work as the plant's only skilled mechanic. This position reports to the wastewater treatment plant supervisor who reviews work for the efficient and effective operation of the plant's equipment.

ILLUSTRATIVE EXAMPLES OF ESSENTIAL DUTIES AND RESPONSIBILITIES:

Communicates technical and mechanical information for problem diagnosis and problem resolution to staff, contractors and manufacturers. Reads and interprets complex information from manuals, diagrams and schematics to perform maintenance, repair and replacement activities for plant equipment, electronics and facilities.

Maintains, repairs, rebuilds, inspects and cleans a wide variety of equipment including performing major repairs on pumps including bearings, seals, shafts, impellers, packings, wear rings, rotors, gears, and frames; installs new pumps including electrical motors; maintains proper shaft alignments on motors ranging from 1/15 to 100 horsepower using micrometers, magnetic base dial indicators, and torque wrenches; maintains and modifies plant plumbing systems to control process efficiency.

Troubleshoots and repairs electronic control systems using voltage meter, resistance measurement device, diode tester, continuity meter and amp meter; checks control systems periodically and replaces units or parts prior to failure in order to prevent equipment outage.

Installs, maintains, and troubleshoots heating equipment fired by oil, natural gas, electricity, or methane ranging from 50K to 860K BTU. Repairs and maintains chlorine and polymer chemical feed systems and analyzers and fabricates specialized plant equipment.

Prioritizes maintenance activities, and performs maintenance and preventative maintenance to ensure operational readiness and compliance with environmental regulations. Monitors contracted upgrades, construction and maintenance operation.

Operates front-end loaders, dump trucks, and tanker trucks when needed to dispose of sludge.

May be assigned plant operator's duties if certified.

Attends work on a regular and dependable basis.

Interacts in a professional and respectful manner with city staff and the public.

OTHER JOB FUNCTIONS:

Maintains inventory of parts used and needed for maintenance management system using a personal computer.

Monitors and oversees biosolid application processes.

Performs Operator duties as needed.

Performs other tasks as assigned.

SELECTION FACTORS:

(Applicants should describe their previous experience and training for each of the following selection factors. These factors will be the basis for selecting the most qualified applicants to be interviewed. Candidates selected for employment must satisfactorily demonstrate possession of these factors during a prescribed probationary period, and afterwards, for continued employment.)

Knowledge of:

- The principles of operation, maintenance, and repair of pumps, valves, and related mechanical and electrical equipment;
- The operation, maintenance, and repair of electronic controls similar to those used in the plant;
- Electronic controls and radio telemetry;
- The operation, maintenance, and repair of gas and electric heating systems;
- The occupational hazards and safety precautions of the plumbing and electrical trades.

Ability to:

- Diagnose and repair plumbing, electrical, and electronic equipment;
- Read and interpret schematic diagrams, blueprints, and technical specification manuals;
- Plan, organize, prioritize and implement preventative maintenance programs and activities;
- Establish and maintain effective working relationships with supervisor, co-workers, and the public;
- Provide quality services in a cost-effective manner and to recommend improved methods of performing the work;
- Obtain a Wastewater Plant Operator Class 2 certificate;
- Physically perform the essential functions of the job.

MINIMUM QUALIFICATIONS:

(Persons applying for a position of this class should have any combination of the following experience and training.)

Two years of experience with troubleshooting and repair of pumps, valves, and related electrical equipment including the repair and maintenance of electronic controls; or substituting course work or training in electronics for the electronic control experience; or any equivalent combination of experience and training. Possession of or ability to obtain a valid commercial driver's license.

TOOLS AND EQUIPMENT USED:

Pumps and motors, laboratory equipment, 10-wheel dump truck, front-end loader/track loader, welding equipment and torches, electrical testing equipment; hand tools including but not limited to: hammer, cut-off saw, tamper, pipe wrench, grinder.

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.)

While performing the duties of this job, the employee frequently works in outside weather conditions. The employee frequently works near moving mechanical parts and is occasionally exposed to wet and/or humid conditions and vibration. The employee occasionally works in high, precarious places and is frequently exposed to fumes or airborne particles, toxic or caustic chemicals, and risk of electrical shock. The employee must frequently lift and/or move up to 25 pounds and occasionally lift and/or move up to 100 pounds.

The noise level in the work environment is usually loud in field settings, and moderately quiet in office settings.

The duties listed above are intended only as illustrations of the various types of work that may be performed. The omission of specific statements of duties does not exclude them from the position if the work is similar, related or a logical assignment to the position.

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

FLSA Classification: Non-Exempt

Adopted: 9/91 Revised: 5/94, 6/99, 12/01