



Position Description

POSITION TITLE: Wastewater Treatment Plant Operator/Mechanic

REPORTS TO: Wastewater Superintendent & Director of Public Works

EMPLOYMENT CLASSIFICATION: Full-Time

LATEST REVISION DATE: 12/2020

DEPARTMENT: Wastewater

FLSA CATEGORY: Non-Exempt

PAY TYPE: Hourly, Pay Grade A-8 (up to Pay Grade A-13 if fully cross-trained)

POSITION SUMMARY

This is a skilled work position in the maintenance and operation of the wastewater treatment plant and related facilities on an assigned shift basis which will include working weekends. Work involves a variety of tasks in the operation, maintenance and repair of wastewater treatment facilities and lift stations utilizing skills acquired on the job and through special training courses. Work involves responsibility for the performance of preventive maintenance as well as skilled repair work on pumps, motors, valves, piping, control equipment, monitoring equipment, settling and aeration tank equipment, sludge disposal equipment, chemical feed equipment, lab equipment and other related equipment and facilities. The work is performed in accordance with established procedures and requires knowledge of operating and maintaining a variety of mechanical equipment. Supervision is received through inspection of work in progress and observation of wastewater plant and lift station operation conditions.

SUPERVISION RECEIVED

Works under the general supervision and direction of the Wastewater Superintendent and the Director of Public Works.

SUPERVISION EXERCISED

Generally none. May direct part-time or inexperienced workers.

ESSENTIAL DUTIES AND RESPONSIBILITIES

- Considerable knowledge of standard practices, methods, tools, materials, chemicals, processes and equipment relating to wastewater treatment and lift station systems;
- Considerable knowledge of the mechanical, hydraulic, pneumatic, plumbing, heating and ventilating, electrical trades and building maintenance;
- Considerable knowledge of the occupational hazards and safety precautions required when working in the wastewater treatment field;



- Working knowledge of the operating principals of pumps, valves, chemical feed equipment, electrical and pneumatic controls, electric power supply for motors and controls, emergency generators and repair methods applicable to all treatment plant equipment;
- Ability to adapt available tools and repair parts to specific repair problem and to recommend equipment to make repairs more effective and efficient;
- Ability to understand and follow oral and written instructions;
- Considerable knowledge of preventive maintenance practices, including record keeping on computer programs;
- Considerable knowledge in the use and maintenance of hand and machine tools used in treatment plant and lift station maintenance and repair work;
- Ability to perform the work and duties of plant operator when required.

EXAMPLES OF WORK

- Makes repairs to, but not limited to, pumps, motors, valves, piping, control and monitoring equipment, chemical feed equipment, sludge disposal equipment and plant facilities.
- Makes repairs to, but not limited to, heating and ventilation equipment, plumbing, electrical, mechanical, lighting, pneumatic and hydraulic systems.
- Determines preventative maintenance procedures, prepares work schedules and expedites workflow; studies and standardizes procedures to improve efficiency and effectiveness of operations and methods.
- Assists Wastewater Superintendent and Director of Public Works with preparing and controlling operating budgets.
- Responds to errors and complaints.
- Assists with maintaining an up-to-date inventory.
- Establishes and evaluates program procedures.
- Oversees equipment and vehicle maintenance and repair.
- Maintains tool, equipment, and supply inventories.
- Assists with investigating accidents.
- Maintains preventative maintenance records and files.
- Participates in employee training programs.
- Assists with conducting new employee orientations.
- Works on standby duty.
- Monitors the performance of all equipment, gauges and charts in the Wastewater Treatment Facility and associated lift stations. Records statistical data concerning plant operations. Maintains, operates, repairs, and replaces equipment as necessary. Evaluates data and writes reports as required.
- Operates, maintains, and repairs malfunctions at the Wastewater Treatment Facility and associated lift stations. Also repairs gauges, pumps, filters, and other controls and equipment.
- Collects samples of wastewater and identifies concentrations of chemical, physical, or biological

characteristics of wastewater as required and in accordance with local, state, and federal requirements.

- Gathers and tests wastewater samples for plant efficiency reports as required.
- Performs quality control tests in accordance with local, state, and federal requirements. Performs calibrations on lab equipment to verify accuracy of equipment. Evaluates procedures and results for accuracy and determines appropriate testing methods.
- Assures that the Wastewater Treatment Facility and associated lift stations operate within required standards and responds quickly to any emergencies or shutdowns.
- Trains and maintains lesser skilled operators in all areas of the Wastewater Treatment Facility and associated lift stations activities.
- Calibrates, modifies, or repairs instrumentation and control equipment including recorder, flowmeters and other wastewater quality monitoring equipment.
- Operates and maintains wastewater lift stations; cleans wet wells, and operates pumps and valves to control flow and treatment process.
- Monitors performance of electrical systems, circuit or equipment; maintains the accuracy of drawings and schematics of electrical and other systems.
- Adds chemicals in accordance with established schedules and standard practices.
- Closely follows the cleaning and maintenance schedule of the Wastewater Treatment facility and associated buildings to maintain a clean and orderly facility.
- Serves on various employee or other committees as assigned.
- Does related work as required.

ESSENTIAL KNOWLEDGE, SKILLS, AND ABILITIES

- Ability to establish and maintain effective preventative maintenance programs for the utility.
- Ability to keep thorough and accurate records and make reports.
- Considerable knowledge of safety precautions and procedures.
- Considerable knowledge of wastewater treatment and lift station methods, practices and procedures.
- Ability to plan, schedule, and supervise the work of others.
- Knowledge of equipment, materials, and supplies used in wastewater treatment.
- Ability to work independently and to complete daily activities according to work schedules.
- Any equivalent combination of education and experience that meets the needs of the City of Two Rivers.

DESIRED MINIMUM QUALIFICATIONS

- Thorough knowledge of all phases of wastewater treatment and lift station systems;
- Ability to develop and maintain effective relationships with other employees;
- Initiative and resourcefulness;

- Ability to express ideas clearly and concisely both orally and in writing;
- Good judgment;
- Thorough knowledge of applicable Federal, State and City policies, laws, and regulations affecting all areas of the wastewater treatment utility.
- Ability to conduct necessary research and compile comprehensive, detailed reports.
- Considerable computer knowledge and experience in the use of word processing, spreadsheets and database programs.

REQUIRED EXPERIENCE, EDUCATION, AND TRAINING

- Training and experience in the operation and maintenance of plant systems and equipment, supplemented by or including course work in the operation and maintenance of mechanical, hydraulic, pneumatic and electrical equipment;
- Skill in locating and adjusting defects in treatment plant equipment and skill in the use and care of hand and machine tools employed in treatment plant repair work.
- Graduation from high school or GED equivalent;
- Minimum of five years' experience relating to the construction, repair and maintenance of all types of equipment relating to wastewater treatment plant and lift station systems;
- Working knowledge or ability to learn computer operations, procedures and software (i.e. Word, Excel, and plant monitoring software for preventative maintenance program).

SPECIAL REQUIREMENTS

Must possess and maintain a valid Commercial Driver's License with all applicable endorsements or have the ability to obtain within six months of employment.

TOOLS AND EQUIPMENT USED

Personal computer, including word processing, spreadsheet, and databases; motor and truck vehicles; mowers, chain saw, edgers, weed trimmers, irrigation systems, telephone, radio, fax and copy machines; and typical mechanic's 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 this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential job functions.

Work is performed in both office settings and outdoors. Outdoor work is performed in all kinds of weather conditions. Hand-eye coordination is necessary to operate computers, various tools and machinery and various types of lab and office equipment.

While performing the duties of this job, the employee is regularly required to stand, walk, use hands to finger, handle, feel or operate objects, tools, or controls; and reach with hands and arms. The employee is required to sit; climb or balance; stoop, kneel, crouch, or crawl, talk or hear, smell.

The employee must frequently lift and/or move up to one hundred (100) pounds to shoulder height

and frequently lift and/or move ten (10) pounds.

Specific vision abilities required by this job include close vision, distance vision, color vision, peripheral vision, depth perception, and the ability to adjust focus.

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 all types of outside weather conditions. The employee frequently works near moving mechanical parts and is exposed to wet and/or humid conditions. The employee occasionally works in high, precarious places and is occasionally exposed to fumes or airborne particles, risk of electrical shock and vibration. The employee is frequently exposed to toxic or caustic chemicals.

The noise level in the work environment is usually moderately loud and occasionally very loud.

OTHER CONDITIONS

As per City policy, a drug and alcohol test will be required prior to employment and residence within 15 miles of the City limits must be maintained throughout employment.

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.

This position is expected to be available for changing work schedules as necessary to assist the street department with snow removal operations, or other emergencies (i.e. storms, floods, etc.)