



Water Treatment Plant Operator

Public Works – Water Treatment Plant

Grade 15

FLSA: Non-Exempt

JOB SUMMARY

This position is responsible for performing specialized duties in the operation of a water treatment plant.

MAJOR DUTIES

- Operates reverse osmosis treatment plant equipment, sets chemical dosages and adjusts flows, monitors backwash filters, calibrates and handles equipment.
- Maintains pumps, motors, wells, meters, water lines, and other equipment.
- Performs laboratory analysis of water from various stages of treatment, adjusts plant operations accordingly.
- Maintains required logs, records, and reports; reads and records meter data and chemical usage; designs spreadsheets and enters data.
- Checks raw water supplies and pumps, records readings.
- Calibrates, troubleshoots, and sets-up process controllers in the plant and repairs pipes, tubes, and valves.
- Collects bacteria samples as required by the Department of Natural Resources.
- Orders materials, supplies, and chemicals and maintains related records.
- Assists distribution and collections crew with projects and meter readings.
- Performs related duties.

KNOWLEDGE REQUIRED BY THE POSITION

- Knowledge of treatment principles, operations, and equipment.
- Knowledge of computers and job-related software programs.
- Knowledge of SCADA operation principles.
- Knowledge of chemistry, mathematics, hydraulics, and biology.
- Knowledge of division and city policies and procedures and federal, state, and local laws and regulations.
- Skill in the interpretation of plans, maps, and specifications.
- Skill in the operation and maintenance of mechanical and electronic equipment.
- Skill in planning, organization, and decision making.
- Skill in thinking clearly under difficult circumstances.
- Skill in oral and written communication.

SUPERVISORY CONTROLS

The Water Treatment Plant Supervisor assigns work in terms of general instructions. The supervisor spot-checks completed work for compliance with procedures, accuracy, and the nature and propriety of the final results.

GUIDELINES

Guidelines include federal and state regulations, OSHA regulations, and city and department policies and procedures. These guidelines are generally clear and specific but may require some interpretation in application.

COMPLEXITY/SCOPE OF WORK

- The work consists of related specialized and technical duties. Changing water conditions contribute to the complexity of the position.
- The purpose of this position is to perform specialized duties in the operation of a water treatment plant. Successful performance helps ensure the provision of safe drinking water for all customers.

CONTACTS

- Contacts are typically with co-workers, representatives of state and federal agencies, vendors, contractors, and the general public.
- Contacts are typically to give or exchange information, resolve problems, and provide services.

PHYSICAL DEMANDS/ WORK ENVIRONMENT

- The work is typically performed while sitting at a desk or table or while intermittently sitting, standing, stooping, walking, bending or crouching. The employee climbs ladders, uses tools or equipment requiring a high degree of dexterity, distinguishes between shades of color, and utilizes the sense of smell. The employee must be able to exert in excess of 100 pounds of force occasionally, and/or in excess of 50 pounds of force frequently, and/or in excess of 20 pounds of force constantly to move objects.
- The work is typically performed in an office, at water treatment facilities, and outdoors, occasionally in cold or inclement weather. The employee may be exposed to machinery with moving parts, contagious or infectious diseases, or irritating chemicals. Work requires the use of protective devices such as masks, goggles, gloves, etc.

SUPERVISORY AND MANAGEMENT RESPONSIBILITY

None.

MINIMUM QUALIFICATIONS

- Knowledge and level of competency commonly associated with completion of specialized training in the field of work, in addition to basic skills typically associated with a high school education.
- Sufficient experience to understand the basic principles relevant to the major duties of the position, usually associated with the completion of an apprenticeship/internship or having had a similar position for one to two years.
- Possession of or ability to readily obtain a valid Class B Commercial driver's license with Tanker and Airbrake endorsements issued by the State of Iowa.
- Possession of or ability to readily obtain a Grade II Water Treatment License within 36 months of date of hire.
- Pre-employment drug testing required.
- Residency within 30 miles of the worksite. Residency to be established within 60 days.

Position last reviewed/updated February 18, 2025