

WATER PLANT OPERATOR

General Statement of Duties

Performs responsible skilled and technical work in operating a surface water treatment plant.

Distinguishing Features of the Class

Employees in this class perform various operational, maintenance, and laboratory duties designed to produce a safe and adequate supply of properly treated water. Work is performed on assigned or rotating shifts and includes monitoring the plant's operations through observation, mechanical and electronic screens, and the results of standard chemical and biological tests and making necessary adjustments in the process as demand or other operational conditions dictate. Work also includes conducting standard laboratory analysis and a variety of equipment, grounds, and facility maintenance. Employees maintain records of work activities and test results. Work is performed following the regulations of the North Carolina Public Water Supply. Work is performed on varying shifts and under general supervision and requires independent problem-solving. Employees work in inside and outside environments, are subject to extreme hot and cold weather, and are exposed to various hazards such as loud noises, moving mechanical parts, electrical current, chemicals, fumes, odors, dust, mists, poor ventilation, working in small spaces such as water mains, and oils. Work is evaluated based on water quality, supply, standard logs and records, and adherence to established operating policy.

Duties and Responsibilities

Essential Duties and Tasks

- Operates the water plant to keep the plant running and avoid shutdown.
- Monitors the treatment process from the control panel and computer screen; monitors various treatment processes including coagulant feed, rapid mix, flocculation, sedimentation, filtration, and disinfection; monitors filters and back washes as necessary.
- Collects lab samples for plant and distribution system and performs standard analyses and tests; keeps precise records and interprets results.
- Reads various charts, graphs, gauges, and meters; computes from readings and records the water volume pumped; monitors elevated storage tank levels.
- Performs problem-solving and process control as necessary to produce safe water that meets federal and state regulations; determines chemical dosage and makes adjustments to plant processes as necessary including for chlorine, caustic, and other chemicals.
- Takes after-hours calls such as no water (due to disconnection or line breaks), mainline breaks, and/or service leaks; makes necessary follow-up calls to dispatch crews, call in locates, or speak with customers regarding service and quality issues, service connections and disconnections, and other issues and provides information and customer service.
- Performs standard repairs and maintenance of plant equipment; may assist with

more difficult or complex equipment repair or replacement.

- Receives and unloads chemical deliveries to the plant; assures proper storage; fills, cleans, and replaces tanks of chemicals.
- Mows and trim grass around the plant and associated facilities; performs custodial care of the building including sweeping and mopping floors, dusting, and cleaning windows and restrooms.
- Makes adjustments or performs maintenance as necessary for weather events and impacts.

Additional Job Duties

Performs related duties as required.

Recruitment and Selection Guidelines

Knowledge, Skills, and Abilities

- Knowledge of state laws regulating surface water purification and the standard procedures necessary to meet permitted requirements.
- Knowledge of the operation and maintenance requirements of equipment, instruments, and control devices used in surface water treatment.
- Knowledge of the standard tests and equipment used in required laboratory analysis of water.
- Knowledge of the application of information technology to plant operator work.
- Skill in customer service and collaborative conflict resolution.
- Ability to independently solve operational problems required to maintain water quality.
- Ability to perform and conduct standard laboratory tests.
- Ability to understand and interpret sometimes detailed and procedural oral and written instructions.
- Ability to accurately read meters, gauges, thermometers, and other standard equipment.
- Ability to prepare detailed records and reports accurately.
- Ability to establish and maintain effective working relationships with co-workers and superiors.

Physical Requirements

- Must be able to perform the basic physical life functions of climbing, balancing, stooping, kneeling, reaching, walking, pushing, pulling, lifting, fingering, grasping, feeling, talking, and hearing.
- Must be able to perform medium work exerting up to 50 pounds of force occasionally, and/or up to 20 pounds of force frequently, and/or up to 10 pounds of force constantly to move objects.
- Must possess visual acuity necessary to read charts, gauges, and dials, to inspect small moving parts, and complete and read a variety of records and reports.

Required Education and Experience

High school diploma or equivalent; coursework in chemistry, biology, or mechanical maintenance preferred; or an equivalent combination of education and experience.

Special Requirement

Ability to obtain level C Water Treatment Operator certification within six months of hire.