

WATER TREATMENT PLANT OPERATOR

General Statement of Duties

Performs responsible skilled and technical work in the operation of a water treatment plant.

Distinguishing Features of the Class

Employees in this class perform a variety of 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 readings, 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 a variety of equipment, grounds, and facility maintenance. Employees maintain records of work activities and test results. Work may be performed in a reverse osmosis water treatment plant (de salinization) to treat well water. Work is performed in accordance with regulations of the State Division of Health Services and the State Division of Environmental Management. Work is performed on varying shifts and under general supervision. 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, dusts, mists, poor ventilation, working in small spaces such as water mains, and oils. Workers may be required to wear respirators when changing chlorine or other chemical tanks. Work is evaluated on the basis of water quality, supply, standard logs and records, and the adherence to established operating policy.

Duties and Responsibilities

Essential Duties and Tasks

Operates the water plant: observes the operation of water pumps, electric motors and chemical feed machines; calibrates equipment.

Operates computerized and/or manual pumps, motors, and other equipment to adjust for volume, change treatment process, or make other necessary changes.

Collects samples and performs standard analyses and tests; keeps precise records and interprets results.

Reads various charts, graphs, gauges, computer screens and meters; computes from readings and records the water volume pumped; adjusts chemical feed based on analysis of water quality produced; monitors elevated storage tank level.

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 and other tanks.

Mows grass around plant and associated facilities; operates trimmer; performs custodial care of building including sweeping and mopping floors, dusting, and cleaning windows and restrooms.

Checks wells and performs preventive maintenance and repairs to wells and pumps; responds to customer complaints about water color, odor, taste, and other issues; participates in distribution sampling program, changes chlorine cylinders, identifies equipment and supply needs.

Maintains accurate and up to date manual and computerized records of work activities.

Additional Job Duties

Performs related duties as required.

Recruitment and Selection Guidelines

Knowledge, Skills, and Abilities

Some knowledge of state laws regulating water purification and the standard procedures necessary to meet permitted requirements.

Some knowledge of the operation and maintenance requirements of equipment instruments and control devices used in water treatment.

Some knowledge of the standard tests and equipment used in required laboratory analysis of water.

Working knowledge of the use of computers.

Ability to operate a manual or a computerized plant.

Ability to solve routine technical or operational problems.

Ability to perform and conduct standard laboratory tests.

Ability to understand and interpret sometimes detailed and procedural oral and written instructions.

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 to complete and read a variety of records and reports.

Desirable Education and Experience

Graduation from high school supplemented by chemistry, biology, or mechanical maintenance course work; or an equivalent combination of education and experience.

Special Requirement

Possession of valid North Carolina driver's license.

Ability to obtain level C well water treatment operator certification within twelve months of employment.

