

JOB TITLE: Water Treatment Plant Operator

WTP/2

DEPARTMENT: Water Treatment Plant, Town of Rocky Mount

FLSA STATUS: Nonexempt – Salary

JOB SUMMARY: This position is responsible for testing, treating, and purifying water for public and industrial use. This position may also be designated as a Water Treatment Plant Operator Class IV, III, II, or I. This may also be used for a Water Treatment Plant Trainee, but duties listed below have to be under the guidance of at least a Class II Operator.

MAJOR DUTIES:

- o Controls treatment plant chemicals, machines, and equipment to purify and clarify water for human consumption and industrial use.
- o Collects representative water samples from the plant and distribution system; performs chemical, and physical tests to assure water quality; submits samples for testing as required by state agencies.
- o Determines and adds specified amounts of chemicals such as chlorine to disinfect, deodorize, and clarify water.
- o Performs and records the results of various laboratory tests to assess water quality and to determine optimal chemical treatment, such as pH, alkalinity, turbidity, chlorine residual, coagulation, temperature, and other related tests.
- o Cleans filter beds using backwashing techniques.
- o Maintains the efficiency of plant and laboratory operations, including maintenance of equipment, pumps, filters, and machinery, testing, quality control, and record-keeping procedures.
- o Calibrates laboratory equipment and chemical feeders to assure proper operation.
- o Maintains plant records, including operations logs, daily diaries, and chemical inventories; compiles reports as required by regulatory agencies.
- o Monitors SCADA, dials, pumps, chemical feeders, laboratory equipment, meters, and gauges in the laboratory to determine status of various functions of the plant; performs equipment and laboratory preventive maintenance duties.
- o Reads, calculates, and records water usage daily.
- o Monitors and maintains pressure and storage tank levels in distribution system.

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- o Performs minor repairs, operations adjustments, and preventive maintenance on plant equipment as needed.
- o Maintains pump station buildings, storage tanks, and pump and valve operations.
- o Reads and records chemical usage; fills chemical feeders; mixes chemicals; changes reagents.
- o Maintains safety measures on Blackwater dam.
- o Checks motors and pumps for excessive noise and temperatures; reports problems to appropriate personnel.
- o Assists in training new employees (Class I or II Operator only).
- o Flushes hydrants and performs testing for water quality issues.
- o Responds to citizens' complaints, some by which results in visiting the customer location and possibly performing tests.
- o Ensures plant is safe and secure.
- o Performs grounds maintenance, including mowing, weed eating, and landscaping, as well as other housekeeping duties as needed.
- o Performs other related duties as assigned.

KNOWLEDGE REQUIRED BY THE POSITION:

- o Knowledge of water system and treatment plant operations.
- o Knowledge of OSHA safety procedures.
- o Knowledge of the handling and application of the chemicals necessary to maintain a safe water supply.
- o Knowledge of standard laboratory principles, techniques, equipment, and materials.
- o Knowledge of laboratory procedures and equipment.
- o Knowledge of basic maintenance concepts and skill with tools.
- o Skill in basic chemistry, mathematics, and biology.

- o Skill in performing standard laboratory-related mathematical calculations.
- o Skill in oral and written communication.

SUPERVISORY CONTROLS: The Water Treatment Plant Superintendent 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 state and federal regulations, drinking water guidelines, plant operations policies, town and department policies and procedures, and standard laboratory practices. These guidelines are generally clear and specific but may require some interpretation in application.

COMPLEXITY: The work consists of related duties in water analysis and treatment. Mechanical failures and changes in water quality contribute to the complexity of the work.

SCOPE AND EFFECT: The purpose of this position is to test, treat, and purify water for public and industrial consumption. Successful performance helps ensure a safe water supply.

PERSONAL CONTACTS: Contacts are typically with co-workers, town employees, plant visitors, and the general public.

PURPOSE OF CONTACTS: Contacts are typically to exchange information, resolve problems, and provide services.

PHYSICAL DEMANDS: The work is typically performed while sitting at a desk or table, standing, walking, bending, crouching, or stooping. The employee lifts light and heavy objects, climbs ladders, uses tools or equipment requiring a high degree of dexterity, and must be able to distinguish between shades of color.

WORK ENVIRONMENT: The work is performed in an office, laboratory, chemical storeroom, and outdoors. The employee is exposed to dust, dirt, grease, machinery with moving parts, infectious or contagious diseases, irritating or hazardous chemicals, and occasional inclement weather. The work requires the use of protective devices such as masks, goggles, gloves, and climbing harnesses.

SUPERVISORY AND MANAGEMENT RESPONSIBILITY: None.

MINIMUM QUALIFICATIONS:

- o Knowledge and level of competency commonly associated with completion of specialized training in the field of work, in addition to basic skills associated with a high school education or equivalency.

- o 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.
- o Possession of or ability to readily obtain a valid driver's license issued by the State of Virginia for the type of vehicle or equipment operated.
- o Possession of or ability to readily obtain the appropriate state-certified license(s) for water treatment. Once license is obtained, it must be maintained and kept current with the required hours of continuing education.