

**CITY OF CONCORD  
CLASS SPECIFICATION**

**CLASS TITLE: WATER TREATMENT PLANT OPERATOR**  
**DEPARTMENT: GENERAL SERVICES**  
**REPORTS TO: WATER TREATMENT PLANT OPERATIONS SUPERVISOR**

**JOB CODE: 2514**  
**DATE: 07/21**

**JOB SUMMARY:**

Performs technical work involving the operation and maintenance of the Water Treatment Plant.

**ESSENTIAL JOB FUNCTIONS:**

Monitors and regulates water treatment plant processes via Security Control and Data Acquisition computer system.

Monitors and regulates operations, which involves conducting tests for chlorine, pH, alkalinity, fluoride, turbidity, and color.

Calibrates and adjusts chemical feed pumps.

Monitors and analyzes water distribution system throughout the city, including system pressure, storage tank levels, and pumping station operations.

Inspects water treatment plant and pumping station equipment for proper operation and potential or existing problems.

Monitors, orders, and receives chemicals used in the water treatment process; ensures that chemicals are of appropriate strength, clarity, and volume.

Maintains operator's log book; uses computerized databases for the plant and pumping stations; analyzes data and prepares required reports.

Operates, calibrates, cleans, repairs, and maintains analyzers, including expandable ion, pH, turbidity, monochloramine, and chlorine analyzers.

Operates water treatment technological equipment including computers, filters, pumps, blowers, generators, sludge collectors, rapid mixers, and flocculators.

Responds to emergency calls and operates emergency generators at plant and pumping stations; investigates customer calls regarding water-related problems.

Locks doors, monitors cameras, and checks identification of vendors and visitors; performs routine facility checks.

Inspects pump station equipment, including pumps, generators, oil levels, heaters, and humidifiers.

Repairs motors, engines, valves, pumps, air ducts, oil seals, and water packings; replaces bearings.

Assists with plowing and removing snow from roadways and walkways during winter season.

Performs minor repairs of water booster stations and related equipment.

Maintains a valid operator's certificate and upgrades knowledge, skills, and development by attending seminars and training programs on new equipment and/or processes.

Performs other related duties as assigned.

**MATERIAL AND EQUIPMENT USED:**

Water Treatment Plant Operator  
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Analyzers  
Motor Vehicle  
Spectrophotometer

Pumps  
Two-Way Radio  
Turbidity Meter

Generators  
pH Meter

**MINIMUM QUALIFICATIONS REQUIRED:**

**Education and Experience:**

High School diploma or GED; and, additional vocational training or course work in water treatment operations; or,

Any combination of education, training and experience which provides the required knowledge, skills and abilities required for the job.

**Licenses and Certifications:**

Valid New Hampshire Driver's License

Current Grade I State of New Hampshire Water Treatment Operator Certification with ability to acquire a Grade II Water Treatment Operator Certification within 1 calendar year from hire.

**KNOWLEDGE, SKILLS, AND ABILITIES:**

**Knowledge of:**

Principles and practices of municipal water systems.

Basic chemistry of water treatment processes.

Federal and state rules and regulations regarding water quality issues.

Standard tools, methods, practices, and materials of one or more trades.

**Skill in:**

Mechanical and electro-mechanical aptitude.

Laboratory techniques for water quality tests.

Advanced computing.

Operation of required tools and equipment.

**Mental and Physical Abilities to:**

Perform routine laboratory tests and analysis.

Perform minor maintenance work on mechanical and electrical equipment.

Establish and maintain effective working relationships with other departments, employees, other agencies, and the general public.

Follow both written and oral instructions, as well as technical instructions.

Read and interpret documents such as safety rules, operation and maintenance instructions, and procedure manuals.

Add, subtract, multiply, and divide whole numbers, common fractions, and decimals.

Solve practical problems and deal with a variety of concrete variables in situations where only limited standardization exists.

Must be able to work irregular hours.

Perform duties while intermittently sitting, standing, stooping, bending, crouching, or walking.

Occasionally lift light and heavy objects.

Climb ladders.

Use tools or equipment requiring a high degree of dexterity.

Distinguish between shades of color.

**Working Conditions:**

Work is performed in a water treatment plant, office, laboratory, and outdoors.

Work exposes the employee to machinery with moving parts, infectious or contagious diseases, and irritating chemicals.

Work is performed outdoors, occasionally in cold or inclement weather.

Work requires the use of protective devices such as masks, goggles, or gloves.

This class specification should not be interpreted as all inclusive. It is intended to identify the essential functions and requirements of this job. Incumbents may be requested to perform job-related responsibilities and tasks other than those stated in this specification. Any essential function or requirement of this class will be evaluated as necessary should an incumbent/applicant be unable to perform the function or requirement due to a disability as defined by the Americans with Disabilities Act (ADA). Reasonable accommodation for the specific disability will be made for the incumbent/applicant when possible.