

PLANT OPERATOR I PLANT OPERATOR II PLANT OPERATOR III

Class specifications are intended to present a descriptive list of the range of duties performed by employees in the class. Specifications are <u>not</u> intended to reflect all duties performed within the job.

SUMMARY DESCRIPTION

Under supervision (Plant Operator I), general supervision (Plant Operator III), or direction (Plant Operator III), performs a variety of skilled technical duties and semi-skilled labor in the operation and maintenance of the City's water or wastewater treatment plant; performs adjustments and repairs to plant equipment; collects and documents samples for laboratory testing; performs lead supervision and training to assigned staff (III level); and performs a variety of related duties as assigned.

DISTINGUISHING CHARACTERISTICS

<u>Plant Operator I</u> – This is the entry-level certified class in the Plant Operator series. This class is distinguished from the Plant Operator II by the performance of the more routine tasks and duties assigned to positions within the series including the update of operations logs and adding and mixing of treatment chemicals under the supervision of higher-level operators. Since this class is certified at the Operator I level, employees may have limited knowledge of plant operations. Advancement to the Plant Operator II level is based on meeting minimum qualifications and satisfactory job performance.

<u>Plant Operator II</u> – This is the full journey-level class within the Plant Operator series. Employees within this class are distinguished from the Plant Operator I by the performance of the full range of duties as assigned. Employees at this level receive only occasional instruction or assistance as new or unusual situations arise, and are fully aware of the operating procedures and policies of the work unit. Positions in this class series are flexibly staffed and positions at the Plant Operator II level are normally filled by advancement from the Plant Operator I level. This class is distinguished from the Plant Operator III in that the latter assumes lead supervisory responsibility over lower level staff. Advancement to the Plant Operator III level is based on meeting minimum qualifications and satisfactory job performance.

<u>Plant Operator III</u> – This is the advanced journey-level class in the Plant Operator series. Positions at this level are distinguished from other classes within the series by the level of responsibility assumed and the complexity of duties assigned, including performing lead supervisory activities and participating in developing goals and procedures for wastewater treatment activities. Employees at this level are required to be fully trained in all procedures related to assigned area of responsibility and have the appropriate certification

REPRESENTATIVE DUTIES

The following duties are typical for this classification. Incumbents may not perform all of the listed duties and/or may be required to perform additional or different duties from those set forth below to address business needs and changing business practices.

- 1. Perform assigned treatment plant rounds; inspect, monitor, troubleshoot, performance test and document plant processes by reading plant equipment gauges, dials, graphs, online analyzers, computer screens, meters, SCADA systems and other instrumentation.
- 2. Operate and adjust treatment plant pumps, motors, feeders and other equipment to maintain appropriate plant operations.
- 3. Maintain, compile and update plant operations logs and reports; perform and record mathematical calculations related to plant operational activities.

- 4. Mix and add treatment chemicals; install and replace chlorine cylinder tanks; ensure adequate chemical application according to regulations and guidelines.
- 5. Install, maintain, repair, modify, troubleshoot and service plant operations machinery and equipment including pumps, valves, motors, meters, tanks, reservoirs, feeders, and online analyzers; change lubrications.
- 6. Collect and document liquid and solid samples and perform a variety of routine water quality laboratory tests; work closely with the laboratory on testing processes; monitor laboratory results; collect water samples as required by the California Department of Public Health.
- 7. Perform general plant facility maintenance such as cleaning, painting and repairing plant facilities; perform various grounds maintenance duties as required.
- 8. Operate a variety of heavy equipment including backhoes, loaders, scrapers, rotovators, forklifts, dump trucks, truck-mounted sludge/compost mixers, and tractor trailer combinations; assist in unloading chemicals as necessary.
- 9. Coordinate construction, maintenance, material selection and repair activities with maintenance, laboratory, contractors, vendors and other staff.
- 10. As assigned, participate in a variety of special projects such as construction of piping, electrical, and structural systems related to assigned work area.
- 11. Conduct tours for the general public, schools, and City staff as necessary.
- 12. Participate in the development of goals and procedures for water or wastewater treatment activities; gather and analyze data; develop a variety of reports.
- 13. Work with a variety of vendors, outside contractors and the general public on water or wastewater activities; answer questions and resolve conflicts.
- 14. Perform related duties as required.

In addition to the above duties, incumbents in Plant Operator III positions may perform the following duties:

- 15. Provide lead supervision and training to assigned personnel; assign tasks and projects to plant operations staff; train staff in appropriate treatment methods and techniques; schedule staff to ensure proper plant coverage; audit and enter timesheet information into the City's computer system for assigned employees.
- 16. Participate in establishing schedules and methods for providing maintenance and repair services; identify resource needs; review needs with appropriate supervisory and/or management staff; allocate resources accordingly.
- 17. Purchase assigned equipment and supplies for the assigned work area utilizing the City's automated purchasing program.

QUALIFICATIONS

The following generally describes the knowledge and ability required to enter the job and/or be learned within a short period of time in order to successfully perform the assigned duties.

Knowledge of:

Principles and practices of water or wastewater treatment plant operations.

Operating principles of plant equipment such as valves, pumps and motors.

Methods and techniques of maintaining, repairing and troubleshooting water or wastewater plant equipment and processes.

Standard principles of the natural sciences including chemistry and biology.

Basic mathematical principles.

Laboratory analysis techniques and health standards for water or wastewater.

Operational and safety regulations pertaining to water or wastewater treatment plant operations and vehicle and equipment usage.

Water or wastewater treatment chemicals used within the plant and their safe use and application.

Sampling methods and techniques.

Office procedures, methods, and equipment including computers and applicable software applications.

Occupational hazards and standard safety practices and procedures.

Pertinent federal, state and local laws and regulations pertaining to water or wastewater treatment.

In addition to the above, incumbents in Plant Operator III positions require knowledge of:

Principles of lead supervision and training.

Principles and practices of timekeeping including proper time codes.

Ability to:

Operate and monitor water or wastewater treatment plant equipment.

Read, interpret and calibrate gauges and other recording devices related to water or wastewater treatment plant operations.

Take liquid and solid samples and perform routine laboratory tests.

Diagnose operating problems and take effective courses of action.

Make independent technical decisions to maintain proper treatment process.

Maintain pertinent records and compile data into written reports.

Perform routine to difficult maintenance, repairs and installations to plant equipment such as pumps, valves, and electronic monitoring devices.

Read, interpret and understand technical manuals, drawings, blueprints, schematics, and diagrams.

Perform heavy manual labor.

Schedule maintenance and repair of water or wastewater treatment plants.

Use and operate self-contained breathing apparatus equipment.

Logically solve problems.

Participate in and complete safety training courses including CPR and Self-Contained Breathing Apparatus (SCBA) training.

Operate office equipment including computers and supporting software applications.

Adapt to changing technologies and learn functionality of new equipment and systems.

Communicate clearly and concisely, both orally and in writing.

Establish and maintain effective working relationships with those contacted in the course of work.

In addition to the above, incumbents in Plant Operator III positions require the ability to:

Audit timesheets and enter information into a computer system.

Assign tasks and special projects to lower level plant operations staff.

Lead and train lower level plant operations staff.

Education and Experience Guidelines - Any combination of education and experience that would likely provide the required knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities would be:

Education/Training:

Equivalent to the completion of the twelfth grade supplemented by specialized training in water or wastewater treatment plant operations.

Experience:

Experience commensurate with each grade level of certification as required by the State of California, which includes some course work in the area of assignment.

License and Certificate:

<u>Water</u>: Possession of a Grade I, II or III Water Treatment Plant Operator certificate issued by the State of California Department of Public Health.

<u>Wastewater</u>: Possession of a Grade I, II, or III Wastewater Treatment Plant Operator certificate issued by the California State Water Resources Control Board.

<u>All Positions</u>: Possession of a valid Class C California driver license. Positions in Wastewater require a Class B driver license within 18 months of employment.

Possession of, or ability to obtain, an appropriate, valid C.P.R. Certificate.

PHYSICAL DEMANDS AND WORKING ENVIRONMENT

The conditions herein are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential job functions.

Environment: Treatment plant environment; exposure to noise, dust, grease, smoke, fumes, gases, solvents, electrical energy, toxic materials, hazardous chemicals and all types of weather and temperature conditions; work in or with water and/or wastewater in confined spaces; work and/or walk on various types of surfaces including slippery or uneven surfaces.

<u>Physical</u>: Sufficient physical ability to perform moderate to heavy lifting; standing and walking for prolonged periods of time; climbing, balancing, stooping, kneeling, crouching and operating motorized equipment.

<u>Vision</u>: See in the normal visual range with or without correction; vision sufficient to read computer screens and printed documents and to operate equipment.

Hearing: Hear in the normal audio range with or without correction.

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