



**JUNE 2018**  
**FLSA: NON-EXEMPT**

## **PLANT OPERATOR I/II**

### **DEFINITION**

Under direct or general supervision, performs a variety of work in the operation, control, and maintenance of the City's water and wastewater treatment and pumping facilities to ensure the adequate and uninterrupted supply of water to the City; operates equipment, facilities, wastewater collection and water distribution systems, pump stations, and related appurtenances as found in water and wastewater treatment plants; assists with preventive maintenance and makes minor repairs to plant facilities and equipment; and performs related work as required.

### **SUPERVISION RECEIVED AND EXERCISED**

Receives direct or general supervision from the Utility Systems Superintendent. May provide technical and functional direction to lower-level staff.

### **CLASS CHARACTERISTICS**

Plant Operator I: This is the entry-level class in the plant operator series. Under direct supervision, incumbents learn to operate and maintain water and wastewater treatment plant equipment and appurtenances according to City practices and procedures, as well as State and Federal regulations. As experience is gained, assignments become more varied and are performed with greater independence. Positions at this level usually perform most of the duties required of the positions at the II level, but are not expected to function at the same skill level and usually exercise less independent discretion and judgment in matters related to work procedures and methods. Work is usually supervised while in progress and fits an established structure or pattern. Exceptions or changes in procedures are explained in detail as they arise. Since this class is often used as a training class, employees may have only limited or no directly related work experience.

Plant Operator II: This is the full journey-level class in the wastewater treatment plant operations series that performs the full range of duties required to ensure that the water and wastewater treatment facilities and systems operate effectively and are maintained in a safe and effective working condition. Responsibilities include performing standardized tests on water and wastewater operations equipment, inspecting and attending to issues in a timely manner, and performing a wide variety of tasks in the preventative maintenance and minor repair of assigned facilities and systems. This class is distinguished from the Senior Plant Operator in that the latter is responsible for technical and functional supervision of lower-level operations staff and is capable of performing the most complex duties assigned to the division.

Positions in the Plant Operator class series are flexibly staffed and positions at the II level are normally filled by advancement from the I level requiring one (1) additional year of experience and after gaining the knowledge, skill, experience, licenses, and certifications which meet the qualifications for and after demonstrating the ability to perform the work of the higher-level class. When filled from the outside, the employee is required to have two (2) years of prior related experience that allows the employee to meet the qualification standards for the II level.

### **EXAMPLES OF TYPICAL JOB FUNCTIONS (Illustrative Only)**

*Management reserves the right to add, modify, change, or rescind the work assignments of different positions and to make reasonable accommodations where appropriate so that qualified employees can perform the essential functions of the job.*

- Monitors plant operations equipment and processes to ensure compliance with environmental and public health standards, including monitoring and making adjustments as needed to optimize efficiency, making chemical dosage changes, changing pumping rates, and monitoring all equipment daily.
- Reviews and analyzes automated information and control system data and revises equipment settings as appropriate; notifies supervisor of unusual situations and makes inspections or corrects system problems as necessary.
- Operates pumps, valves, chlorinators, telemetry controls, sludge presses, and other water and wastewater flow regulating controls and equipment.
- Collects water, wastewater and other samples from various phases of the treatment process; performs standard chemical and physical tests on these samples to ensure that plants are operating effectively and that regulatory requirements are being met.
- Inspects and maintains water pipelines, pumps, valves, tanks, reservoirs, and related appurtenances; inspects and tests lines in the distribution system.
- Observes and responds to variations in operating conditions by interpreting meter, gauge, and graph readings and tests results to determine pressure requirements.
- Cleans and flushes water and wastewater analyzers; backwashes pressure filters and cleans scum boxes.
- Records meter reading for irrigation and river discharge; throttles pumps and valves to ensure water flow is within controllable bounds.
- Conducts alarm checks on all analytical and telemetry equipment, standby generators, and remote pumping stations.
- Performs preventative and routine maintenance on a variety of equipment related to the operation, maintenance, and control of water and wastewater treatment and production systems and facilities, including wastewater collection and water distribution systems.
- Performs a variety of general and ground maintenance activities, including mowing, edging, and trimming landscaped areas as scheduled, weed abatement, and painting facilities and equipment when needed.
- Installs street barricades and cones and controls traffic around work sites and special events to ensure safe conditions for the general public and City workers.
- Maintains work areas in a clean and orderly condition, including securing equipment at the close of the workday.
- Responds to complaints and answers questions from public or escalates to supervisor, as necessary.
- Responds to operations, maintenance, and repair emergency situations as required.
- Maintains records and logs of daily activities; prepares reports as necessary.
- Assists in ordering chemicals and supplies as needed.
- Observes safe work methods and makes appropriate use of related safety equipment as required.
- Performs other duties as assigned.

### **QUALIFICATIONS**

#### **Knowledge of:**

- Basic principles, practices, tools, and materials as they relate to the operation, cleaning, and preventive maintenance of water and wastewater treatment plants, facilities, and equipment.

- Basic principles and practices of record-keeping methods.
- Safe driving rules and practices.
- Basic computer software related to work.
- English usage, spelling, vocabulary, grammar, and punctuation.
- Techniques for providing a high level of customer service by effectively dealing with the public, vendors, contractors, and City staff.

**Plant Operator II, in addition to the above:**

- Principles, practices, tools, equipment, and supplies required to maintain, operate, and control water distribution systems, reservoirs, pump stations, and water and wastewater treatment plants.
- Mechanical, electrical, and hydraulic principles.
- Basic equipment troubleshooting principles and practices
- Operational and maintenance practices of electrical motors, pipes, pumps, and circuitry.
- Computer software related to the work, including the operation of the water telemetry system and its devices.
- Standard chemical and physical tests of water and wastewater.
- Occupational hazards and safety equipment and practices related to the work, including the handling of hazardous chemicals and confined space entry.
- Applicable Federal, State, and local laws, regulatory codes, ordinances, and procedures relevant to assigned area of responsibility.

**Ability to:**

- Safely and effectively use and operate hand tools, mechanical equipment, and power tools required for the work.
- Perform basic modification, maintenance, and repair work on water production systems, reservoirs, pump stations, and water and wastewater plants and equipment.
- Maintain accurate logs, records, and basic written records of work performed.
- Operate a motor vehicle safely.
- Understand and follow oral and written instructions.
- Organize own work, set priorities, and meet critical time deadlines.
- Use English effectively to communicate in person, over the telephone, and in writing.
- Establish, maintain, and foster positive and effective working relationships with those contacted in the course of work.

**Plant Operator II, in addition to above:**

- Troubleshoot maintenance problems and determine materials and supplies required for repair.
- Conduct standard chemical and physical tests of water, wastewater, and related materials.
- Interpret and apply the policies, procedures, laws, codes, and regulations pertaining to assigned programs and functions.
- Read, interpret, and apply technical information from manuals, drawings, specifications, layouts, blueprints, and schematics.
- Follow department policies and procedures related to assigned duties.
- Use tact, initiative, prudence, and independent judgment within general policy, procedural, and legal guidelines.

**Education and Experience:**

*Any combination of training and experience that would provide the required knowledge, skills, and abilities is qualifying. A typical way to obtain the required qualifications would be:*

Plant Operator I and II: Equivalent to the completion of the twelfth (12th) grade.

Plant Operator I: Some experience involving the installation, maintenance, and repair of water pumps and related systems is desirable.

Plant Operator II: Two years of increasingly responsible experience involving the routine operation of water and wastewater treatment plants and related equipment and systems.

**Licenses and Certifications:**

Plant Operator I/II

- Possession of a valid California Driver's License.

Plant Operator I

- Possession of a Wastewater Treatment Plant Operator Grade I certification issued by the California State Water Resources Control Board.
- Possession of a Water Treatment Operator Grade I certification issued by the California State Water Resources Control Board (formerly California Department of Public Health Services).

Plant Operator II

- Possession of a Wastewater Treatment Plant Operator Grade II certification issued by the California State Water Resources Control Board.
- Possession of a Water Treatment Operator Grade II certification and a Grade D1 Distribution System License issued by the California State Water Resources Control Board.

**PHYSICAL DEMANDS**

Must possess mobility to work in the field; strength, stamina, and mobility to perform medium to heavy physical work, to work in confined spaces and around machines, to climb and descend ladders, to operate varied hand and power tools and construction equipment, and to operate a motor vehicle and visit various City sites; vision to read printed materials and a computer screen; and hearing and speech to communicate in person and over the telephone or radio. The job involves fieldwork requiring frequent walking in operational areas to identify problems or hazards. Finger dexterity is needed to access, enter, and retrieve data using a computer keyboard or calculator and to operate above-mentioned tools and equipment. Positions in this classification bend, stoop, kneel, reach, and climb to perform work and inspect work sites. Employees must possess the ability to lift, carry, push, and pull materials and objects weighing up to 100 pounds, or heavier weights with the use of proper equipment.

**ENVIRONMENTAL ELEMENTS**

Employees work in the field and are exposed to loud noise levels, cold and hot temperatures, inclement weather conditions, road hazards, vibration, confining workspace, chemicals, mechanical and/or electrical hazards, and hazardous physical substances and fumes. Employees may interact with upset staff and/or public and private representatives and contractors in interpreting and enforcing departmental policies and procedures.

*The City of Calistoga is an Equal Opportunity Employer. In compliance with the Americans with Disabilities Act, Calistoga will provide reasonable accommodations to qualified individuals with disabilities and encourages both prospective and current employees to discuss potential accommodations with the employer.*