# WATER/WASTEWATER TREATMENT PLANT OPERATOR I/II

#### **DEFINITION**

Participates in the operation and maintenance of the water/wastewater treatment plants and distrubtion/collection systems. Monitors plant equipment and processes to ensure plant efficiency, and makes adjustments accordingly; performs directly related work as required.

#### **DISTINGUISHING CHARACTERISTICS**

#### Water/Wastewater Treatment Plant Operator I

Working under direct supervision, Water/Wastewater Treatment Plant Operator I is the entry-level in the Water/Wastewater Treatment Plant Operator series. Employees at this level receive in-service training in the less complex and more routine tasks involving the maintenance and operation of the equipment and systems of the water and wastewater treatment plants. As requisite skills and knowledge are developed, greater independence and full scope of responsibility is exercised. Some positions may be allocated at Level I due to the limited nature of the work. Otherwise, positions in this class are usually flexibly staffed and incumbents are expected to advance to the higher level of Water/Wastewater Treatment Plant Operator II after successfully completing a probationary period, demonstrative proficiency, and obtaining any additional requirements which are needed to meet the qualifications for the higher level class as determined by the department.

#### Water/Wastewater Treatment Plant Operator II

Working under general supervision, this is the journey level in the Water/Wastewater Treatment Plant Operator series. Employees at this level are expected to be fully qualified to perform the full range of water/wastewater treatment plant operation and maintenance duties, including that which requires additional certifications. Positions in this class are typically flexibility staffed and normally filled by advancement for the lower level of Water/Wastewater Treatment Plant Operator I, or if filled from the outside, require prior related experience.

# **EXAMPLES OF DUTIES (Illustrative Only)**

Duties may include, but are not limited to the following. For Water/Wastewater Treatment Plant Operator I, duties are performed at the trainee level.

- Monitors and adjusts plant equipment and processes to ensure compliance with environmental
  and public 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.
- Reads gauges, dials and other instruments that depict and/or record data.

- Reviews and analyzes automated information and control systems data and revises equipment settings as appropriate; notifies supervisor of unusual situations and corrects system problems as necessary.
- Services and maintains a variety of plant equipment, including pumps, valves, motors, filters, meters, and related equipment.
- Interprets laboratory and process tests to optimize plant performance, checks the results, and makes appropriate changes.
- Performs proper usage and handling of chemicals according to industry standards.
- Performs preventive maintenance on equipment and instruments to ensure efficient operation and accurate instrument readings, including referencing related manuals to explain device functions as necessary.
- Inspects treatment plant equipment and backup generators to ensure proper operation, locate and report needed repairs.
- Maintains accurate records, including calculating the daily use of energy and chemicals, and completing required monthly reports.
- Performs daily equipment checks, including cleaning and painting plant equipment, daily programming of discharge timer, and related duties.
- Keeps immediate supervisor and designated others accurately informed concerning work progress, including present and potential work problems and suggestions for new or improved ways of addressing such problems.
- Attends meetings, conferences, workshops, and training sessions and reviews publications and audio-visual materials to become and remain current on principles, practices, and new developments in assigned work areas.
- Responds to questions and comments from the public in a courteous and timely manner. Informs supervisor regarding information and topics discussed.
- Communicates and coordinates regularly with appropriate others to maximize the effectiveness and efficiency to interdepartmental operations and activities.
- Performs landscape maintenance around water and wastewater facilities.
- Performs other directly related duties consistent with the role and function of the classification.

### **QUALIFICATIONS**

#### **Thorough Knowledge of:**

- Operating principles of valves, pumps, piping, bearings, motors, electrical and electronic equipment and mechanical systems for water and/or wastewater treatment technology.
- Water/Wastewater sampling procedures and chemical and biological laboratory tests used in monitoring water/wastewater treatment processes and interpretation of results.
- Mathematics, biology, and water and/or wastewater treatment sciences.
- Standards and regulations related to the collection, treatment, disposal, and distribution of water and wastewater.
- Basic equipment troubleshooting principles and practices.
- Principles, methods, and practices of water and/or wastewater collection, treatment, disposal and/or distribution including basic chemistry and hydraulics as applied to water/wastewater treatment.
- Record keeping techniques

- Safe work procedures related to work, including the storage and handling of toxic chemicals in confined spaces.
- Techniques for providing a high level of customer service to the public and City staff, in person and over the telephone.

# **Ability To:**

- Learn and perform a wide range of operations, repair, and maintenance activities at water and wastewater treatment facilities, water and sewer pumping facilities, disposal facilities and/or storage facilities.
- Work independently and with full responsibility for the facilities as needed.
- Prioritize tasks and problems, with the more critical problems being handled first.
- Work quickly and efficiently.
- Operate and maintain various pumps, piping, and mechanical systems for water and/or wastewater treatment.
- Perform laboratory tests and interpret the results.
- Read, understand and apply a wide variety of laws, rules mandated standards and regulations, instruction manuals, blue prints, diagrams, labels, and other technical information.
- Keep accurate records, and write reports.
- Work with dangerous chemicals in a safe and prudent manner.
- Communicate effectively with others, both orally and in writing, using both technical and non-technical language.
- Understand and follow oral and/or written policies, procedures, and instructions.
- Prepare and present accurate and reliable reports containing findings and recommendations.
- Operate a personal computer using standard or customized software applications appropriate to assigned tasks.
- Use logical and creative thought processes to develop solutions according to written specifications and/or oral instructions.
- Perform mathematical calculations, including percentages, proportions, and the use of analytical formulas.
- Perform a wide variety of duties and responsibilities with accuracy and speed under the pressure of time-sensitive deadlines.
- Quickly learn and put to use new skills and knowledge brought about by rapidly changing information and/or technology.
- Exercise integrity, ingenuity, and inventiveness in the performance of assigned tasks.

# **Education and Experience:**

# Water/Wastewater Treatment Plant Operator I/II

Possession of a high school diploma or GED.

### Water/Wastewater Treatment Plant Operator I

One (1) year of experience in the maintenance and repair of water and wastewater treatment, collection, distribution, storage, or disposal equipment/systems.

# Water/Wastewater Treatment Plant Operator II

Two (2) years of experience equivalent to Water/Wastewater Treatment Plant Operator I in the City of Rio Dell.

Note: A combination of education and experience equivalent to those listed above may be considered as qualifying.

### Other Requirements:

# Water/Wastewater Treatment Plant Operator I

Must possess and maintain the following:

- Valid California Class C State Driver's license with satisfactory driving record.
- Water and/or Wastewater Treatment Plant Operator-In-Training Certificate as issued by the State
  Water Resources Control Board within 60 days of appointment (unless the incumbent possess a
  Water and/or Wastewater Treatment Plant Operator Grade II certificate).
- Water and Wastewater Treatment Plant Operator Grade I Certificates as issued by the California State Department of Health Services or the State Water Resources Board within the second testing period following eligibility.
- Satisfactory certificate as a forklift operator within 30 days of appointment.

### Water/Wastewater Treatment Plant Operator II

Must possess and maintain the following:

- Valid California Class C State Driver's license with satisfactory driving record.
- Water and Wastewater Treatment Operator Grade II Certificates as issued by the State Water Resources Control Board.
- Satisfactory certificate as a forklift operator within 30 days of appointment.

#### **PHYSICAL DEMANDS:**

The physical and demands described here are representative of those that must be met by employees to successfully perform the essential functions of this classification. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

**Speech/Hearing:** Sufficient clarity of speech and hearing or other communication capabilities, with or without reasonable accommodation, to enable the employee to communicate effectively.

**Vision:** frequently see items between 12 inches and 20 feet away; frequently use both eyes; occasionally distinguish colors, shades of colors, and use depth perception.

Manual Dexterity: frequently grasp, feel, type on a keyboard, and pick up objects with fingers.

**Strength and Mobility:** carry, push, pull, reach items that are frequently up to 25 pounds and occasionally up to 100 pounds; frequently climb, stoop, kneel, crouch, reach, stand, walk, sit, push, pull, and maintain balance; to occasionally crawl.

#### WORKING CONDITIONS:

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this classification. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

Work is performed both inside and outside in various types of weather, incumbents may work with constant noise; frequently be exposed to dust, grease, solvents/chemicals and electrical energy; occasionally be exposed to fumes, smoke or gases; frequently work on slippery or uneven surfaces, around machinery with moving parts, around moving objects or vehicles, or with hands in water; occasionally be exposed to pesticides; occasionally works below ground, on ladders or scaffolding, or in confined spaces.