



**APPROVED BY: THE CHIEF
ADMINISTRATIVE OFFICER**

EFFECTIVE: November 2011

ASSISTANT WATER PLANT OPERATOR I/II

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

DEFINITION

To assist the state-designated shift operator in the monitoring and operation of a District water treatment plant.

DISTINGUISHING CHARACTERISTICS

Assistant Water Plant Operator I

The Assistant Water Plant Operator I is the trainee-level class in the Water Plant Operator series. Incumbents have no prior experience working as an operator in a water treatment plant.

Employment is conditional upon acquiring and demonstrating, within a reasonable period-of-time, the knowledge and skill level of an Assistant Water Plant Operator II. Advancement is at the discretion of management and is dependent on demonstrating possession of the experience, license, knowledge, and ability requirements of the higher-level class.

Assistant Water Plant Operator II

This is the experienced-level class in the Water Plant Operator series. Incumbents in this class possess some experience working as an operator in a water treatment plant, but do not possess the knowledge and skill sufficient to serve as a state-designated shift operator.

Employment is conditional upon acquiring and demonstrating, within a reasonable period of time, the knowledge and skill level of a Water Plant Operator. Advancement is at the discretion of management and is dependent on demonstrating possession of the experience, license, knowledge, and ability requirements of the higher, journey-level class.

SUPERVISION RECEIVED AND EXERCISED

Works under supervision.

TYPICAL TASKS

Typical responsibilities and duties may include, but are not limited to, the following:

1. Regularly conduct rounds to monitor plant operations and maintain plant equipment and grounds; observe, evaluate, troubleshoot, and report condition of the facility and equipment, including, pipes, pumps, valves, feeders, motors, basins, tanks, generators, analyzers, and sludge beds; take and record measurements and instrument readings, such as pressures, temperature, flow, volume and concentrations; operate and adjust pumps and valves; calibrate and perform preventative maintenance on plant instruments; observe and report on the flow, volume, and quality of the water, including color, odor, and turbidity; and assist in maintaining grounds in a clean, orderly, and secure state.
2. Draw samples of water and other materials from the different phases of water treatment; measure and analyze the samples to determine compliance with district and regulatory standards for chlorine, ozone, phosphate and ammonia residuals, pH, turbidity, taste, and odor.
3. Perform cleaning and maintenance procedures on operating equipment and facilities, including flocculators, basins, filters, belt presses, and containment and delivery areas.
4. Receive and monitor deliveries of bulk chemicals and other plant supplies.
5. Perform sludge disposal, including managing the volume and distribution of the sludge, applying polymer compound and operating belt presses to dry the sludge, and loading the dry sludge into trucks for transport to a landfill.
6. Use the plant's computer based Supervisory Control and Data Acquisition (SCADA) system to monitor plant operations; scan multiple computer monitors simultaneously; navigate a multitude of program screens to observe, track, and retrieve water, chemical and equipment readings.
7. Perform various administrative tasks including data entry into spreadsheets, update standard operating procedures, initiate work orders, maintain, compile, and update plant operations logs and reports.
8. Employees have a responsibility for safety; for following safety regulations and safety policies and procedures applicable to their work; and for carrying out those responsibilities with due diligence as a condition of employment.
9. Perform related duties and responsibilities as required.

QUALIFICATIONS

Assistant Water Plant Operator I

Some Knowledge of:

Chemistry necessary to monitor and operate a water treatment plant as required by the State of California.

Math necessary to use formulas to calculate rates, ratios, pressure, dosages, concentrations, volumes, and dilution factors as required by the State of California to operate a water treatment plant.

Common desktop applications such as email, word processing, spreadsheets and database programs.

Operational characteristics of common mechanical equipment such as pumps, valves, motors and meters.

Working Knowledge of:

Each employee shall possess a reasonable understanding of their roles and responsibilities as defined in the District's Injury and Illness Prevention Program.

Ability to:

Operate a personal computer and common applications such as email, word processing, spreadsheet and database programs.

Navigate and interpret SCADA screens and data.

Multi-task with short deadlines.

Comply with standards, rules, regulations, policies and procedures.

Apply mechanical aptitude to monitor, operate and maintain water treatment plant machinery and equipment, including pumps, motors, feeders and valves.

Collect samples and perform routine laboratory tests to measure water quality indicators such as turbidity, pH, Threshold Odor Number, and ozone, chlorine, phosphate and ammonia residuals.

Read and interpret gauges, recording devices and related monitors.

Recognize, identify, diagnose and respond to water quality and operating problems.

Determine what information needs to be recorded.

Interpret and transcribe data.

Assistant Water Plant Operator II

Some Knowledge of:

Chemistry necessary to monitor and operate a water treatment plant as required by the State of California.

Math necessary to use formulas to calculate rates, ratios, pressure, dosages, concentrations, volumes, and dilution factors as required by the State of California to operate a water treatment plant.

Common desktop applications such as email, word processing, spreadsheets and database programs.

Operational characteristics of the mechanical equipment and chemical feed systems for the assigned treatment plant.

State regulations pertaining to the shift operation of a T-5 rated water treatment plant, including reporting procedures and requirements.
SCADA system components and capabilities.

Working Knowledge of:

Each employee shall possess a reasonable understanding of their roles and responsibilities as defined in the District's Injury and Illness Prevention Program.

Ability to:

Operate a personal computer and common applications such as email, word processing, spreadsheet and database programs.
Navigate and interpret SCADA screens and data.
Multi-task with short deadlines.
Comply with standards, rules, regulations, policies and procedures.
Apply mechanical aptitude to monitor, operate and maintain water treatment plant machinery and equipment, including pumps, motors, feeders and valves.
Collect samples and perform routine laboratory tests to measure water quality indicators such as turbidity, pH, Threshold Odor Number, and ozone, chlorine, phosphate and ammonia residuals.
Read and interpret gauges, recording devices and related monitors.
Recognize, identify, diagnose and respond to water quality and operating problems.
Determine what information needs to be recorded.
Interpret and transcribe data.

TRAINING AND EXPERIENCE GUIDELINES

The following combination represents the minimum training and experience requirements for this classification:

Assistant Water Plant Operator I

Training

Equivalent to the completion of the twelfth grade supplemented by Six (6) quarter units in chemistry and six (6) quarter units in math from an accredited college.

Experience

None.

License or Certificate

Possession of a valid class C California driver's license.

As a condition of employment individuals must acquire and maintain a Grade T2 Water Treatment Operator certificate issued by the California Department of Public Health (CDPH) within eighteen (18) months of appointment.

Substitution

An Associate's degree in engineering or chemistry from an accredited college may substitute for the training and experience required at the time of application.

Possession of a Grade T1 Water Treatment Operator certificate issued by the California Department of Public Health (CDPH) may substitute for the training requirement at the time of application.

For staff assigned to work at the Advanced Recycled Water Treatment Facility, a Grade 2 Wastewater Operator certificate issued by the California State Water Resources Control Board may substitute for the Grade T2 Water Treatment Operator certificate.

Assistant Water Plant Operator II

Experience

One (1) year experience performing work as an operator at a water treatment plant or waste water treatment plant.

License or Certificate

Possession of a valid class C California driver's license.

Possession of a Grade T2 Water Treatment Operator certificate issued by the California Department of Public Health (CDPH).

As a condition of employment, individuals must acquire and maintain a Grade T3 Water Treatment Operator certificate issued by CDPH within twenty-four (24) months of appointment.

Substitution

For staff assigned to work at the Advanced Recycled Water Treatment Facility, a Grade 2 Wastewater Operator certificate issued by the California State Water Resources Control Board may substitute for the Grade T2 Water Treatment Operator certificate.

For staff assigned to work at the Advanced Recycled Water Treatment Facility, a Grade 3 Wastewater Operator certificate issued by the California State Water Resources Control Board may substitute for the Grade T3 Water treatment Operator certificate.

WORKING CONDITIONS

Environmental Conditions

Water treatment plant environment; work with and around water; confined spaces, exposure to noise, potentially hazardous chemicals, and inclement weather conditions; work with others; Water Treatment Plants operate 24/7 and require operators to work all shifts on a rotating basis, including nights, weekends and holidays; Must be able to work mandatory overtime and/or call back within the required response time.

Physical Conditions

Essential functions may require maintaining physical condition necessary for: moderate to heavy lifting and carrying, sitting, standing, and walking for extended periods of time; operating motorized equipment and vehicles; smelling and hearing for assessing the condition of plant operations; visual and color acuity for reading computer screens, documents, data, correspondence, and water quality; using telephones; intermittently twist, stretch and grasp to reach materials or equipment; operating office equipment, and wearing personal protective equipment.

CLASS LEGEND

Established Date: Unknown
Revision Dates: 10/2007, 01/1999
Employee Group: EA

	<u>Current</u>	<u>Previous</u>
Assistant Water Plant Operator I:	FA1	647
Assistant Water Plant Operator II:	FA2	646

Series Code: 1FA
Family Code: A04
Previous Titles: TBD
Analyst: FD