Advanced Treatment Facilities Operator

DEFINITION
Under supervision of the Treatment and Distribution Supervisor, serves as shift leader for Treatment Facilities and Water Treatment Plant Operators assigned to distribution and membrane treatment facilities; operates, inspects and maintains the District’s membrane water treatment plants, blending facility, reservoirs and related facilities to supply, treat, store and distribute water for a large urban potable water distribution system; independently operates all systems in the District’s membrane plants, blending facility and SCADA distribution control; assumes tasks and responsibilities assigned to the Reservoir Facilities Operator; oversees and follows security procedures; analyzes complex and unusual operating situations and matters and provides analyses, reports, and recommendations to optimize operations; effectively transfers knowledge and competencies and may provide lead direction to less experienced operators; and performs other related work as required.

Advanced Treatment Facilities Operators function as Shift Operators as defined by the State of California Health Department and accept the responsibilities inherent in a treatment plant operator who is also operating a distribution system as stipulated in California Code of Regulations, Title 22, Division 4 CCR, Chapter 13, Articles 1,2,3,4,5 and Chapter 15, Article 2.

DISTINGUISHING CHARACTERISTICS
Advanced Treatment Facilities Operator (ATFO) is the advanced-journey level classification in the Treatment Facilities Operator series. Under general supervision within a framework of established policies and procedures, incumbents are fully qualified Treatment Facilities Operators who, based on District experience, Grade T-3 Water Treatment Plant Operator Certification and Grade D-2 Water Distribution Operator Certification, are thoroughly competent to function as Shift Operator making decisions involving the quality and quantity of water treated and delivered; to effectively operate all systems in the District’s membrane plants, the blending facility and SCADA distribution control; to assume tasks and responsibilities related to the efficient operation and general maintenance of reservoirs and related facilities, to effectively transfer complex knowledge and competencies and provide lead direction to less experienced operators.

This class is distinguished from the Treatment Facilities Operator classification which has responsibility for inspection, operation and minor maintenance of all reservoirs and chemical injection equipment at the blending facility and remote sites. These classifications are flexibly staffed. The Treatment Facilities Operator II normally advances to this advanced-journey level classification after three (3) years experience at the journey-level, obtaining Grade T3 Water Treatment Plant Operator and Grade D-2 Water Distribution Operator certifications, receiving a performance rating of “meets requirements” overall on the most recent evaluation and supervisory confirmation of proficiency in the job requirements of the advanced-journey level classification.

TYPICAL DUTIES
TYPICAL EXAMPLES OF DUTIES MAY INCLUDE BUT ARE NOT LIMITED TO THE FOLLOWING:

- Assists in the scheduling of production staff to assure adequate coverage of shifts
• Provides lead direction, training and work review for operations staff.

• Assists in the oversight of the administrative aspects of operating treatment facilities and the distribution system, including completion of monthly reports, time sheets, inventory records and maintenance requests.

• Coordinates review and update of operations procedure manuals.

• Operates all equipment used to treat and regulate water flow through the District’s Reverse Osmosis and Ultra-Filtration membrane water treatment plants, blending facility and conventional treatment facilities at MSJWTP; and equipment used to manage residuals generated from such processes in order to meet production requirements and drinking water quality standards.

• Independently and in conjunction with other Water Production staff, performs basic mechanical and instrumentation maintenance on facilities and distribution equipment.

• Computes chemical doses and adjusts chemical feeders.

• Monitors and controls the water supply, transmission and storage systems through a plant supervisory control and data acquisition (SCADA) system, and analyzes and acts accordingly to control flow through various transmission and distribution facilities or to take other actions as required.

• Prepares and maintains detailed and accurate logs, records and reports on a variety of functions including; plant operations, laboratory test results, maintenance work performed, unusual operating conditions and the results of periodic inspections conducted; uses a computer to maintain data base files and generate reports.

• Takes regular inventories of chemicals and other supplies used during the operation of water facilities; orders operating supplies and chemicals as needed; and assists with the safe unloading and storage of chemicals.

• Works with hazardous chemicals related to water treatment; receives training and responds to hazardous chemical spill events at District facilities.

• Operates District communications center during off hours, on weekends, holidays and as needed;

• Receives calls from customers, dispatches personnel if needed; maintains telephone and radio communications with field employees, security forces and others, including lock out/tag out programs, confined space program and emergency operations plan in a twenty-four hours/day, seven days/week operation.

• Learns and receives training on a variety of issues including: advanced operational and technological developments in the water industry and safety and environmental compliance requirements.

• Maintains operating equipment and facilities in a clean and orderly condition; performs
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routine housekeeping chores inside and outside facilities and conducts regular site safety inspections.

- With proper training, may perform the assigned responsibilities of a Treatment Plant Operator and/or a Solids Handling Operator on an as-needed basis.

- May conduct tours for individuals or groups, as requested.

- May operate a motor vehicle, fork lift or front-end loader incidentally in the performance of work.

- Performs other related work as required.

REQUIREMENTS
Any combination of education and experience that would likely provide the required knowledge, skills, and abilities is qualifying. A typical way to obtain the knowledge, skills, and abilities would be the equivalent of:

Education and Experience:
High school diploma or equivalent and three (3) years experience as a Treatment Facilities Operator with the District.

Knowledge, Skills and Abilities:
Working Knowledge of: the operation, maintenance and cleaning of water treatment and distribution system equipment and facilities; distribution system operation and control via SCADA; emergency power facility, P.A.C. system, Reverse Osmosis and Ultra-Filtration operations; shutdown procedures, including unplanned shutdowns; security procedures and responsibilities; procedures for providing and overseeing on-the-job training; water treatment principles, methods, and practices; safe work practices and pertinent safety rules, codes, and regulations; arithmetic; the methods and precautions related to storing and handling chlorine and other hazardous chemicals; mechanical, electrical, and hydraulic principles; identification, use and safe operation of standard hand and power tools and equipment; and standardized water quality tests.

Advanced Skill and Ability to: conduct planned and unplanned shutdowns; operate the more complicated systems, including the emergency power facility, all pre-treatment facilities including the Powdered Activated Carbon (PAC) System, the R.O. and Ultra-Filtration operations and all elements of the distribution system via SCADA; oversee and apply security procedures and handle related responsibilities; provide advanced-journey level expertise to lower-level operators and conduct on-the-job training on the more complex aspects of the work; analyze complex and unusual operating situations and matters and provide analyses, reports and recommendations; make basic arithmetic calculations quickly and accurately; effectively use computers for data base management and to generate reports; establish and maintain effective working relationships; and perform essential duties of the job without causing harm to self or others.

Additional Requirements:
- Must possess a valid California driver’s license and have a satisfactory driving record
- Must possess a T-3 California Water Treatment Operator Certificate
- Must possess a D-2 California Distribution Operator Certificate
Working Conditions/Physical Requirements:
The essential duties of this classification require the ability to work outdoors under various climatic and geographic conditions; to work rotating assignments; to work weekends, holidays, and overtime as needed; to work with and around hazardous chemicals; to be clean shaven and able to wear respiratory protection equipment as required; to complete necessary Continuing Education (CEU) as required to obtain, maintain and renew requisite certification.

The essential duties of this classification require repetitive use of feet and hands to operate vehicles, equipment and tools; the ability to lift sacks of chemicals weighing up to 55 pounds; to speak to verbally exchange ideas and information; to hear to receive verbal detailed information and instruction; to see at arms length to twenty feet with a good field of vision and the ability to distinguish basic colors; to walk, stand and climb for sustained periods of time; and finger dexterity and hand strength to operate and grasp tools and equipment on a daily basis.

Revised 3/15
Approved: [Signature]
Human Resources/Risk Manager