

**CITY OF CARLSBAD
CLASS SPECIFICATION**

JOB TITLE: **WATER SYSTEMS OPERATOR I
WATER SYSTEMS OPERATOR II
WATER SYSTEMS OPERATOR III**

DEPARTMENT: **UTILITIES**

BASIC FUNCTION:

Under general supervision, operate, repair and maintain potable and recycled water distribution facilities and related structures and equipment; to perform water quality assurance requirements and duties, water treatment, and to perform related work as assigned.

DISTINGUISHING CHARACTERISTICS:

Water Systems Operator I is the entry-level class in this operations series. Under close supervision, incumbents learn and perform a variety of duties in operation, maintenance, and repair of the potable and recycled water distribution facilities and related structures and equipment and perform water quality assurance work. This class is alternately staffed with Water System Operator II and incumbents may advance to the higher level after gaining two years of experience and demonstrating proficiency which meets the qualifications of the higher-level class.

Water Systems Operator II is journey level in this series. Under general supervision incumbents perform the full range of operation, maintenance and repair of the water distribution facilities and related structures and equipment and perform water quality assurance work. The next higher level performs on-going lead responsibility for the work of the Water Operations crew.

Water Systems Operator III is the lead level in this class series. Incumbents work with minimum supervision and assist in providing direction to crew(s), performs a variety of the most responsible and skilled operations, requirements, duties, assignments and tasks. This level is distinguished from the Water Systems Supervisor who is responsible for the overall operation and performance of the water operations division and is classified as a management level position.

KEY RESPONSIBILITIES:

Water Systems Operator I/II:

Operates and maintains critical water infrastructure including valving, regulating, chemical feed and pumping stations, reservoirs and related facilities to assure proper operation of the potable and recycled water systems.

Reads and interprets monitoring devices on water distribution equipment; calculates and adjusts chemical dosages; performs preventive maintenance on production and feed equipment; constructs, modifies and repairs equipment; logs and records readings; repairs and replaces pumps, motors, chlorinators, regulators and related equipment.

Takes water samples and performs standard laboratory tasks; responds to customer complaints.

Performs basic electrical and electronic maintenance and repair work.

Operates various air, electric and hand tools and equipment, computerized equipment and test equipment.

Prepares and maintains a variety of computerized and written records, reports and logs.

Responds to emergency calls, may work varying hours, weekends, holidays, days off and perform stand-by duty as assigned.

Uses safe work practices and procedures, appropriate safety precautions and equipment.

Water System Operator III:

Directs and assigns work to crews in supervisor's absence, including training and evaluating work, monitoring work in progress at the worksite and directing corrections and modifications as appropriate.

Estimates and secures tools, materials and equipment required for assigned jobs: discusses work to be performed with supervisor, assigns tasks to individual crew members.

Maintains written and computerized records of work performed and materials used; prepares a variety of written records and reports related to the work.

May be assigned to coordinate work assignments with other divisions; respond to questions and requests as appropriate.

Performs special projects as assigned.

QUALIFICATIONS:

Knowledge of:

Water System Operator I/II:

- Basic hydraulic principles used in water distribution systems.
- Applicable federal and state water quality regulations and best practices.
- Methods, materials, tools and equipment used in the operation, maintenance and repair of water distribution systems and facilities.
- Operation and maintenance of a wide variety of hand and power tools and equipment.
- Safe work methods, regulations and equipment pertaining to the work.
- Basic computer operation principles.

Water System Operator III:

- Basic supervisory principles and practices.
- Computerized record keeping and procedures.

Ability to:

Water System Operator I/II:

- Performs skilled operation, maintenance and repair work on potable and recycled water distribution systems and facilities.
- Operates and maintains a wide variety of hand and power tools and equipment.
- Maintains effective working relationships, understands and follows oral and written instructions.
- Performs heavy physical labor.
- Withstands exposure to varying weather conditions, works in wet and/or odorous areas and work in confined areas, tanks and structures.
- Independently diagnoses malfunctions and problems and makes quick, accurate repairs and responses.

Water System Operator III:

- Directs the work of subordinates, including training and evaluating work procedures and safety practices.
- Maintain various accurate written and computerized records and reports.

EXPERIENCE AND EDUCATION:

Any combination equivalent to experience and education that could likely provide the required knowledge and abilities is qualifying.

Water System Operator I:

Equivalent to graduation from high school and six months experience in a water related field or mechanical/electrical repair and maintenance. Completion of a water distribution class is desirable.

Water System Operator II:

In addition to the above, a minimum two years of recent experience in water distribution systems operations and maintenance equivalent to the Water System Operator I classification.

Water System Operator III:

In addition to the above, two years journey level experience in water distribution systems operations and maintenance equivalent to the Water System Operator II classification.

SPECIAL REQUIREMENTS (MINIMUM):

Water System Operator I/II/III:

Must possess a valid California Class C Driver's License; must be willing to work in confined spaces which may expose the employee to hazardous atmospheric conditions; and are required to use a respirator which prohibits full heads and facial hair that may interfere with a proper fit.

Water System Operator I:

Must possess a California Department of Public Health (CDPH) Water Distribution Grade 2 certification. A CDPH Water Treatment Grade 2 certification is desirable.

Water System Operator II:

Must possess a CDPH Water Distribution Grade 3 certification and a Water Treatment Grade 2.

Water System Operator III:

Must possess a CDPH Water Distribution Grade 4 certification and a Water Treatment Grade 2 certification.

PHYSICAL STANDARDS:

Work may be performed outdoors in all weather conditions with exposure to traffic and other hazards. Operators must be physically able to stand, stoop, bend, lift and maintain awkward body positions for prolonged periods of time. Must be able to handle, including lift, carry or manipulate heavy equipment and other material up to 50 pounds both alone and with assistance from others. Must be available to work overtime and to respond to emergency calls and work varying hours, including weekends, holidays, and unscheduled days as needed, and to perform "stand-by" duty as assigned.

DATE APPROVED: June 21, 2011