



CROSS-CONNECTION CONTROL SPECIALIST

DEFINITION

Under general supervision, performs a variety of technical and specialized duties in support of the city's water, and cross-connection control and backflow prevention program development, implementation, and maintenance; ensures regulatory compliance with safe drinking water standards and federal, state, and local codes, laws, and regulations; conducts field investigations, surveys, tests, and audits of work performed and inspections completed by third party vendors and/or contract staff; prepares reports; maintains a variety of records and files; and performs related duties as assigned.

CLASS CHARACTERISTICS

This journey-level classification is responsible for independently performing technical duties in support of the city's water, and cross-connection control and backflow prevention program. Positions at this level exercise judgment and initiative in their assigned tasks, receive only occasional instruction or assistance as new or unusual situations arise, and are fully aware of the operating procedures and policies of the work unit.

SUPERVISION RECEIVED AND EXERCISED

Receives general supervision from the Public Works Superintendent. Exercises no direct supervision over staff.

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 so that qualified employees can perform the essential functions of the job.

- Performs technical and specialized duties in support of the city's cross-connection control and backflow prevention program development, implementation, and maintenance including data management oversight, field investigations, surveys, tests, audits, and oversight of work performed by city vendors and contract staff.
- Ensures all program activities comply with federal, state, and local codes, laws, and regulations related to current safe drinking water standards.
- Issues citations to customers that violate provisions of the Municipal Code.
- Contacts customers to ensure compliance with backflow device requirements and ensures customers make appropriate repairs; monitors or generates and sends initial notices, follow-up notices, and final notices to owners of backflow devices for compliance with annual testing requirements; maintains records and files on backflow prevention devices, locations, inspections, testing, and corrections.
- Surveys and investigates plumbing systems to evaluate and identify cross connection hazards; explains findings and recommends installation of backflow prevention devices; follows up with customers to monitor compliance; performs tests to ensure proper working conditions of devices.
- Locates, inspects, tests, and repairs new and existing backflow prevention devices within the city's service area; maintains and installs devices as required.
- Prepares written inspection reports and related program documentation; maintains inspection documentation and records as required in accordance with established city records management procedures.
- Collects and maintains field data and test results for documentation and reporting purposes; maintains and ensures the accuracy of detailed databases, files, and records of work performed.

- Maintains, operates, inspects, repairs and installs water distribution system facilities, including piping, storage tanks, meters, hydrants, valves, pressure reducing stations, pumping stations, pumps, controls, and water quality testing.
- Checks, troubleshoots, repairs, and maintains, water tanks, reservoirs, pressure reducing stations, and pump stations.
- Monitors water quality by collecting representative water samples; perform laboratory tests for turbidity, color, odor, coliform, chlorine residual, and other tests as required; preserves samples for later shipment to the laboratory.
- Reviews and analyzes data relating to water quality; monitors compliance and recommends adjustments to obtain and ensure conformity and prepares reports as needed
- Receives and responds to customer complaints, questions, and requests for service; reads, interprets, applies, and explains regulations and standards to customers.
- Receives and responds to inquiries from contractors, developers, engineers, and the public concerning the city's rules and regulations regarding the cross-connection control and backflow prevention program.
- Reviews proposed developments with respect to compliance with backflow prevention and cross-connection control regulations; conducts plan checks and evaluations to ensure compliance.
- Research new operational methods, techniques, equipment, and regulatory requirements; recommend appropriate application and action; requisitions necessary tools, equipment, and supplies after approval.
- Attends and participates in professional group meetings; maintains liaison with other city departments, divisions, businesses, contractors, and other agencies, including regulatory agencies, and participates in public awareness and water conservation programs.
- Performs various other technical and specialized duties related to the inspection and service of recycled water systems as required by the State of California.
- Observes and complies with all state and city safety rules, regulations, and protocols; assist and trains other personnel in the areas related to water, and cross connection to ensure staff is in compliance with the same.
- Assists in installation or upgrade of backflow devices; assists and trains personnel in areas related to cross connection
- Performs related duties as required.

QUALIFICATIONS

Knowledge of:

- Principles, practices, techniques, equipment, and materials required for installing, locating, inspecting, testing, and repairing backflow prevention devices.
- Principles, standards, and regulatory requirements related to water distribution and cross-connection control.
- Principles, practices, and terminology of residential, industrial, construction, and commercial wastewater discharge source control and pollution prevention related to water quality.
- Occupational hazards, standard safety procedures, and related safety equipment.
- Principles and practices of data collection, technical report preparation, and recordkeeping.
- Basic mathematics techniques.

- Operation and minor maintenance of a variety of inspection equipment, hand and power tools, and vehicles involved in the installation, maintenance, and repair of backflow prevention devices and related water distribution systems.
- Applicable federal, state, and local laws, rules, regulations, ordinances, and procedures relevant to assigned areas of responsibility.
- City geography, street routes, and location of meters and backflow devices.
- Techniques for providing a high level of customer service by effectively dealing with the public, vendors, contractors, and city staff.
- The structure and content of the English language, including the meaning and spelling of words, rules of composition, and grammar.
- Modern equipment and communication tools used for business functions and program, project, and task coordination.

Ability to:

- Investigate, identify issues, and ensure compliance with the city's cross-connection control and backflow prevention program rules and regulations.
- Install, locate, inspect, test, and repair new and existing backflow prevention devices; including property and reclaimed water site inspections.
- Understand, interpret, and apply all pertinent laws, codes, regulations, policies and procedures, and standards relevant to work performed.
- Read and interpret maps, blueprints, specifications, and related technical documents.
- Assemble data and prepare reports and maintain records of testing and findings.
- Read and interpret a variety of meters, gauges, and recording charts.
- Make accurate arithmetic and statistical computations.
- Safely and effectively use and operate a vehicle and tools and equipment required for the work.
- Effectively represent the department and the city in meetings with governmental agencies, various business, professional, and regulatory organizations, and in meetings with individuals.
- Maintain a variety of filing, recordkeeping, database, records, and tracking systems.
- Independently organize work, set priorities, meet critical deadlines, and follow-up on assignments.
- Communicate clearly and concisely, both orally and in writing, using appropriate English grammar and syntax.
- Establish, maintain, and foster positive and effective working relationships with those contacted in the course of work.
- Effectively use computer systems, software applications relevant to work performed, and modern business equipment to perform a variety of work tasks.

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:

- Equivalent to completion of the twelfth (12th) grade, supplemented by specialized training in backflow prevention, cross-connection control, water distribution, or a related field; and
- Three (3) years of increasingly responsible field and/or office experience related to water distribution and cross-connection control, including inspections, data collection, public contact, and the interpretation and application of policies, procedures, rules, and regulations.

Licenses and Certifications:

- Possession of a valid California Driver’s License and a satisfactory driving record to be maintained throughout employment.
- Possession of a valid Backflow Prevention Assembly Tester Certificate issued by the American Water Works Association (AWWA) or Northern California Backflow Prevention Association (NCBPA), to be maintained throughout employment.
- Possession of a valid Cross-Connection Control Specialist Certificate issued by the NCBPA, to be maintained throughout employment.
- Possession of a valid Grade II (D-2) Water Distribution Operator Certificate issued by the State of California Water Resource Control Board, to be maintained throughout employment.

PHYSICAL DEMANDS

When assigned to an office environment, must possess mobility to work in a standard office setting and use standard office equipment, including a computer; vision to read printed materials and a computer screen; and hearing and speech to communicate in person and over the telephone; ability to stand and walk between work areas may be required. Finger dexterity is needed to access, enter, and retrieve data using a computer keyboard or calculator and to operate standard office equipment. Positions in this classification occasionally bend, stoop, kneel, reach, push, and pull drawers open and closed to retrieve and file information.

When assigned to field inspection, must possess mobility to work in changing site conditions; possess the strength, stamina, and mobility to perform light to medium physical work; to sit, stand, and walk on level, uneven, or slippery surfaces; to reach, twist, turn, kneel, and bend, to climb and descend ladders; and to operate a motor vehicle and visit various city sites; vision to inspect site conditions and work in progress. The job involves fieldwork requiring frequent walking in operational areas to identify problems or hazards, with exposure to hazardous materials in some site locations. Employees must possess the ability to lift, carry, push, and pull materials and objects averaging a weight of 40 pounds, or heavier weights, in all cases with the use of proper equipment and/or assistance from other staff.

ENVIRONMENTAL CONDITIONS

Employees work in an office environment with moderate noise levels, controlled temperature conditions, and no direct exposure to hazardous physical substances. Employees also 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 in interpreting and enforcing departmental policies and procedures.

WORKING CONDITIONS

City employees are expected to work overtime, weekends, evenings, and holidays as required to accommodate the City’s needs.

Employees in this classification are subject to on-call, which may include rotating-duty schedule, weekends, and 24-hour emergency call out with little or no notice.

CLASSIFICATION HISTORY

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| Title | Cross-Connection Control Specialist |
| Classification Code | |
| Classification Established | 7/2025 |
| Classification Revised | XXXX |
| FLSA Status | Non-Exempt |
| Bargaining Group | American Federation of State, County, and Municipal Employees |