

**CITY OF CARLSBAD  
CLASS SPECIFICATION**

**JOB TITLE: CROSS-CONNECTION CONTROL TECHNICIAN**

**DEPARTMENT: UTILITIES**

**BASIC FUNCTION:**

Under general supervision, to enforce the city cross-connection control programs including the Recycled Water Program and the Backflow Prevention Program.

**DISTINGUISHING CHARACTERISTICS:**

The Cross-Connection Control Technician is distinguished by the specialized knowledge of the cross-connection control program and level of responsibility and independence of actions taken in enforcing these programs.

**KEY RESPONSIBILITIES:**

Conduct inspections of private recycled water systems, working with the Use Site Supervisor to resolve any non-compliance issues.

Design, coordinate, and conduct cross-connection tests at a wide variety of recycled water use sites in conjunction with the Health Department and Use Site Supervisor.

Perform plan checks on irrigation plans.

Read irrigation and improvement plans.

Perform inspections of irrigation system installations for compliance with approved plans, specifications, materials, and standards.

Respond to inquiries from contractors, developers, engineers, landscape architects and the general public concerning the city's rules and regulations regarding the cross-connection control program, including special requirements for recycled water use.

Maintain liaison with regulatory and other water agencies related to the cross-connection control program.

Represents the city at meetings; works closely with the County Health department.

Identify businesses where backflow prevention assemblies are necessary, notify and advise customers where and what type of assemblies need to be installed; follow-up to ensure that the appropriate assemblies have been installed.

Investigate backflow prevention assemblies that are in need of repair or replacement and notify customers.

Test, install, and maintain backflow prevention assemblies.

Maintain computerized records and files of backflow prevention assembly locations, inspections, test results and corrections.

Install, repair and maintain all city facility backflow prevention assemblies.

Prepare correspondence and maintain appropriate records, files, and documentation.

May act as Sr. Cross-Connection Control Technician in his/her absence.

Perform other related work as assigned.

## **QUALIFICATIONS:**

### **Knowledge of:**

- Possess in-depth knowledge of cross-connection control, water distribution, and hydraulics.
- State and city regulations related to the cross-connection control program and related use of recycled water systems.
- Have a general understanding of Microsoft Word, Excel, and Access.
- Specific tools, equipment, materials and procedures used in backflow testing, maintenance, repair, and installation.
- City streets and location of backflow prevention assemblies.
- Basic plumbing and piping systems in order to perform cross-connection surveys.
- Quality control methods and techniques.
- Safe work practices and regulations.
- Basic arithmetic.

### **Ability to:**

- Enforce city cross-connection control regulations and rules through investigation and identification of non-compliance and seek resolutions in a tactful manner.
- Exercise initiative and judgment relative to enforcement activities.
- Compose correspondence using proper grammar and spelling.
- Conduct backflow tests, installations, and repairs.
- Effectively communicate with people from a wide variety of socio-economic backgrounds.
- Deal tactfully and remain courteous and calm in tense and/or hostile situations.
- Perform mechanical maintenance and repair tasks.
- Perform basic arithmetic calculations accurately.
- Operate a variety of hand and power tools and other types of mechanical equipment.
- Follow and enforce safety rules and regulations.
- Carry out assigned duties in a safe and efficient manner.
- Maintain computerized records and prepare reports accurately and completely.
- Understand and follow written and oral instructions.
- Work independently and efficiently to carry out assignments.

**EXPERIENCE AND EDUCATION:**

Any combination equivalent to experience and education that could likely provide the required knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities would be as follows:

Three years of progressively responsible water field experience and coursework in Water Distribution, Hydraulics and Cross-Connection Control.

**SPECIAL REQUIREMENTS:**

Possession of a valid California Driver's License (Class C). Certification by the American Water Works Association (AWWA) and/or American Backflow Prevention Association (ABPA) as a Backflow Prevention Assembly Tester and Cross-Connection Control Specialist. Certification by the State of California Dept. of Public Health as a Water Distribution Operator II.

**PHYSICAL REQUIREMENTS AND ENVIRONMENT:**

Extended periods of standing and walking on a variety of terrains to inspect or investigate recycled water use sites or to examine backflow assemblies.

Upper body strength to lift, carry and manipulate backflow prevention assemblies, pressure recorders, and other related equipment.

Willingness to work in confined spaces which may expose employee to hazardous atmospheric conditions, using appropriate safety equipment.

The majority of work is performed outdoors and through inclement weather as necessary.

Willingness to work overtime hours or respond to emergency calls during unscheduled hours as required.

During course of employment may be trained in Hazardous Materials related to the response plan for emergency operations.

DATE APPROVED: June 21, 2011