

## **CITY OF ARCADIA**

### **WATER QUALITY BACKFLOW INSPECTOR**

#### **DEFINITION**

Under direction, to perform a variety of technical duties involved in the installation, testing, assembly, repair, and inspection of backflow and cross connection devices for the water distribution system; to collect water samples; to perform inspections on new construction and remodels; to flush water mains; to prepare and mail monthly backflow prevention device test notices; and to track, log, and file test reports returned by customers.

#### **SUPERVISION EXERCISED**

Exercises no supervision.

#### **EXAMPLES OF IMPORTANT AND ESSENTIAL DUTIES**

Implement the Cross Connection Control program to ensure that the water system is protected from contamination.

Test all newly installed backflow prevention devices to ensure compliance with all laws and ordinances.

Inspect residential and commercial facilities for compliance with the City's backflow ordinance.

Approve the installation of backflow prevention devices at the time of final inspection of new and remodeled residential and commercial facilities.

Consult with and advise others in the correction or elimination of cross connection hazards.

Inform customers of backflow violations and explain laws, rules, and regulations.

Perform and supervise cross connection surveys to determine locations of actual and potential cross connections.

Maintain records of all backflow inspections, cross connection survey and violations.

Work directly with the County Health Department, City Building Division, and State Department of Health Services regarding water quality and backflow issues.

Prepare and mail notices to customers including monthly backflow prevention device test notices, second and final notices of delinquency to test backflow prevention devices, and water shutoff notices for failure to test backflow prevention devices.

**EXAMPLES OF IMPORTANT AND ESSENTIAL DUTIES**

Prepare and distribute notices to property owners to ensure timely testing of cross connection control devices.

Assemble backflow cross connection preventers; solder pipe and fittings; replace old or damaged backflow preventers; install backflow preventers in customers' lines.

Install fittings on backflow connectors to connect differential pressure gauge for periodic testing; conduct periodic tests of backflow prevention devices.

Present reports to City Council regarding backflow issues.

Repair and replace City-owned backflow prevention devices.

Maintain computer database of licensed backflow prevention device testers.

Conduct inspections with Los Angeles County Health Department District Sanitarian to verify compliance with water quality and backflow prevention requirements.

Collect routine water system samples and special water samples for water quality testing in compliance with State, Federal, and local regulations.

Flush water mains as necessary to maintain system water quality

Respond to and resolve inquiries and complaints regarding water quality.

Utilize instrumentation to measure chlorine residual, temperature, pH, and other physical components or chemicals in the water system.

Distribute sample bottles; educate customers; collect samples for the Lead and Copper Regulation compliance.

Disinfect water mains, fire hydrant runs and reservoirs.

Notify customers of requirements for testing fire line backflow devices; notify customers of backflow device requirements; perform fire flow tests.

Survey customers' premises for cross connections.

Maintain test data records on backflow preventers.

**EXAMPLES OF IMPORTANT AND ESSENTIAL DUTIES**

Compile data from laboratory and complete reports to State Health Department and Federal Environmental Protection Agency for bacteriological, nitrate, and volatile organics

contamination compliance, lead and copper compliance, and other constituents. Coordinate and schedule routine and special water quality samples with laboratory staff.

### **OTHER JOB RELATED DUTIES**

Perform related duties and responsibilities as assigned.

### **JOB RELATED AND ESSENTIAL QUALIFICATIONS**

#### **Knowledge of:**

Practices, methods, equipment, tools, and materials used in the assembly, repair, installation and testing of backflow and cross connection devices.

Federal, State and local water quality regulations.

Water sampling procedures.

Pertinent Federal, State, and local laws, codes, and regulations including the Uniform Plumbing Code.

Principles and procedures of record keeping.

Basic mathematical principles.

Occupational hazards and standard safety practices necessary in the area of work.

Principles and practices used in dealing with the public.

Safe driving principles and practices.

#### **Skill to:**

Operate a variety of equipment, tools, and testing devices used in the assembly, repair, installation, and testing of backflow and cross connection prevention devices.

Operate a motor vehicle safely.

Perform heavy manual labor for extended periods of time in all types of weather.

#### **Ability to:**

Assemble, repair, install, and test backflow and cross connection prevention devices.

Prepare and maintain accurate and complete records.

Perform accurate mathematical computations.

Work independently in the absence of supervision.

Understand and follow oral and written instructions.

Interpret and apply the policies, procedures, laws, and regulations pertaining to assigned programs and functions.

Read, interpret, and apply a technical information from manuals, drawings, specifications, layouts, blueprints, and schematics.

Meet and deal tactfully and effectively with the public.

Communicate clearly and concisely, both orally and in writing.

Establish, maintain, and foster positive and harmonious working relationships with those contacted in the course of work.

**Minimum Qualifications:**

**Experience:**

Two years of experience performing backflow device testing and maintenance or other water utility mechanical maintenance.

**Training:**

Equivalent to the completion of the twelfth grade supplemented by course work necessary to obtain backflow device certification.

**License or Certificate:**

Possession of, or ability to obtain, a valid class "C" driver's license.

Possession of a Water Treatment Operator, Grade II Certificate issued by the State of California Department of Health Services.

Possession of, or ability to obtain within one year, a Cross Connection Specialist Certificate issued by the American Water Works Association.

Possession of, or ability to obtain within one year, a Backflow Device Tester Certificate issued by the American Water Works Association.

**Special Requirements:**

*Essential duties require the following physical skills and work environment:*

Ability to sit, stand, walk, kneel, crouch, stoop, squat, crawl, twist, climb, push, pull, and lift 50 lbs., distinguish color, and wear protective apparel; exposure to cold, heat, noise, outdoors, vibration, confining work space, chemicals, explosive materials, mechanical hazards, electrical hazards, and traffic hazards; ability to travel to different sites and locations; availability for on-call, stand-by, and emergency call.

**Effective Date:** January 2004

**Revised:** May 2019