

## WATER QUALITY INSPECTOR

### JOB DESCRIPTION

**Classification Responsibilities:** A Water Quality Inspector is responsible for performing technical and program administration duties in support of the Water Quality Unit. Work as a Water Quality Inspector involves continual learning in order to understand and stay current on regulations, procedural updates, and water quality issues. A Water Quality Inspector assigned to water sampling is responsible for obtaining water samples from a variety of sources including: well sites, the distribution system, reservoirs, treatment plants, and customers' homes. Samples are analyzed in the City of Mesa's laboratory, or contracted to outside labs. A Water Quality Inspector assigned to water sampling is responsible for making arrangements with laboratories, reviewing all results for accuracy, and generating compliance reports. In addition, employees prepare water sampling plans, maintain program compliance with federal and state requirements, and write associated compliance reports.

A Water Quality Inspector assigned to backflow prevention is responsible for assisting in the administration of the backflow program including: conducting site inspections, conducting site surveys, performing hazard analysis of customer sites, approving new installations, maintaining the compliance database, and testing backflow assemblies. This position performs related duties as required.

**Distinguishing Features:** The Water Quality Inspector is distinguished from other inspector classifications by its responsibility for water quality compliance activities, and assisting in the administration of the backflow prevention program. This class is subject to emergency call-out and must be available to work overtime and stand-by as required. An employee in this class is required to use appropriate safety equipment and follow safety procedures in performing assignments. Employees may progress to this class by noncompetitive promotion upon meeting the specific criteria-based promotion requirements. A Water Quality Inspector may be supervised by either the Water Quality Supervisor, or the Cross Connection Control Inspector (based on assignment). This class is FLSA nonexempt.

### QUALIFICATIONS

**Employee Values:** All employees of the City of Mesa are expected to uphold and exhibit the City's shared employee values of Knowledge, Respect, and Integrity.

**Minimum Qualifications Required.** Any combination of training, education, and experience equivalent to graduation from high school or GED. Good (1 - 3 years) experience with a water treatment, or backflow, or water distribution system, or a closely related area along with some (6 months - 1 year) experience in public contact work, preferably involving the enforcement of laws, ordinances, and/or environmental regulations.

**Special Requirements.** Must possess a valid Arizona Driver's License by hire or promotion date. Must possess a Grade II Water Distribution System Operator, **OR** Grade II Water Treatment Plant Operator Certification from the Arizona Department of Environmental Quality (ADEQ) by application date. Must hold a valid Backflow Prevention Assembly General Tester Certification by application date. Forty-hour HazWoper certification is required within 18 months of hire date.

**Substance Abuse Testing.** Due to the safety and/or security sensitive nature of this classification, individuals shall be subject to pre-employment or pre-placement alcohol, drug and/or controlled substance testing as outlined in City policy and procedures.

**Preferred/Desirable Qualifications.** None.

## **ESSENTIAL FUNCTIONS**

One position may not include all of the essential functions, knowledge and abilities listed, nor do the listed examples include all the knowledge and abilities which may be found in positions of this classification.

**Communication:** Communicates with the general public, other City employees, vendors, management, contractors, or state and county officials in order to enforce regulations and provide assistance with water quality and backflow issues. Prepares and presents water quality and backflow prevention issues to internal and external customers. Maintains records of annual backflow prevention device testing and notifies customers to ensure that devices are in proper operating condition. Computes and compiles information to be used in compliance reporting, and for reference by City employees and Mesa citizens. Responds to customer complaints about water quality and backflow, and determines appropriate corrective action.

**Manual/Physical:** Samples the domestic water system and wells using various sampling procedures for compliance with Primary and Secondary Drinking Water Regulations. Investigates water quality complaints using various testing methods to determine the nature of the problem, and to initiate necessary corrective actions. Conducts annual testing and maintenance of backflow prevention assemblies using various testing gauges and hand tools to ensure that devices are in proper operating condition. Distinguishes colors to perform color comparative tests such as chlorine level and bacterial analysis. Operates a motor vehicle requiring a standard Arizona Driver's License to travel to sites to conduct inspections and collect water samples. Uses common hand tools such as: hammers, screwdrivers, wrenches, pliers, shovels, brooms, etc., to repair backflow preventers. Performs flushing operations using valve wrenches to open and close blow off valves and fire hydrants. Operates a variety of standard office equipment to create documents, and enter data on a personal computer (PC) to update records and create reports. Prepares and updates maps, schedules, and graphs to create reports. Moves objects such as ice chests weighing up to 80 lbs. using a cart or other aid, for distances up to 100 feet to deliver to shippers. Works in a variety of weather conditions while performing inspections and collecting water samples. Works in small, cramped areas while performing backflow testing. Works around large pumps and valves, and on construction sites. Meets scheduling and attendance requirements.

**Mental:** Investigates industrial and commercial on-site water systems for cross-connections, which could contaminate the municipal water supply and endanger the public health. Inspects and evaluates backflow prevention installations to determine compliance with standard details for installation. Understands the technical basis for federal and state regulations, and is able to apply them to specific field situations. Reviews civil and architectural drawings for compliance with backflow prevention ordinances. Identifies pollution hazards in water system cross-connection installations, and specifies

methods to correct them. Uses independent judgment to resolve complex issues. Uses a PC and related software programs to generate reports.

**Knowledge and Abilities:**

Knowledge of:

regulations pertaining to public water systems and backflow prevention programs;  
lab procedures and practices;  
water system operation and the dynamics and characteristics of water pressure and flow;  
point-of-use water treatment devices and their proper applications;  
backflow prevention assemblies and their applications;  
cross-connection control practices and procedures;  
techniques involved in collecting water samples and performing the related tests;  
how to use PC based word processing, spreadsheet, and database programs; and  
occupational and safety precautions of the work.

Ability to:

use and care for testing and sampling equipment used in work activities;  
implement and explain the policies and regulations pertaining to the cross-connection program;  
prepare concise, clear, and accurate reports; and  
establish and maintain effective working relationships with coworkers, property and  
business owners/officers, and their representatives.

The duties listed above are intended only as general illustrations of the various types of work that may be performed. Specific statements of duties not included does not exclude them from the position if the work is similar, related, or a logical assignment to the position. Job descriptions are subject to change by the City as the needs of the City and requirements of the job change.

Revised to update Special Requirements 6/16

LW/st/th

CS4230.DOCX

PAY GRADE: 45

EEO-Tech

IND-7520

JOB FCTN-TEC

SWORN-No

INCREMENTS 81-200