

## WATER PLANT MAINTENANCE SPECIALIST III

### JOB DESCRIPTION

**Classification Responsibilities:** The Water Plant Maintenance Specialist III is responsible for performing journey-level lead work that involves training, mentoring operations and maintenance staff, installing, maintaining, and repairing water treatment equipment/facilities or water pump systems. Incumbents may be assigned to either Brown Road Water Treatment Plant or to the Water Supply Unit. Some examples of duties performed include: conducting pump efficiency, vibration analysis, and shaft alignment tests on wells and booster pumps; maintaining and repairing pressure reducing valves; pouring and finishing cement; laying conduit and pulling wire for electrical needs; performing plumbing work including cutting, threading, and welding pipe; installing and replacing pumps, compressors, motors, and related equipment; lubricating bearings; replacing seals, gaskets, springs and gears; installing, maintaining, and repairing water supply and water treatment equipment and facilities including, but not limited to: pumps, compressors, pipes, rapid mixers, flocculator drive units, carbon feeders, chlorine equipment, valves, gear boxes, tanks, and swing arms, etc. Incumbents train and provide lead supervision over plant operators, other maintenance personnel, part-time employees, and other staff as needed. These duties may vary depending on assignment to the Brown Road Water Treatment Plant or the Water Supply Unit.

**Distinguishing Features:** This class is distinguished from other Water Plant Maintenance Specialists by its responsibility for performing journey-level lead work in the Water Treatment Plant or water system maintenance. This class is distinguished from the Water Plant Maintenance Supervisor and the Water/Wastewater Superintendent class by supervisor classes having full responsibility for overseeing the entire staff. This position as assigned to the Brown Road Water Treatment Plant provides leadership, mentorship, training, and coordination of activities to subordinate maintenance staff. The position is subject to serve in a lead capacity for plant maintenance activities in the absence of the Water Plant Maintenance Supervisor. This class is supervised by the Water Plant Maintenance Supervisor or the Water/Wastewater Field Supervisor, depending on the incumbent's work assignment, through the on-site observation of work in progress or the finished project and meetings regarding problems or potential problems discovered while performing routine duties. Job hazards may include frequent exposure to a variety of weather conditions, chlorine gas, fluoride, ferrous chloride, toxic chemicals associated with water treatment and high-voltage lines and equipment. An employee in this class is required to use appropriate safety equipment and follow safety procedures in performing assignments. This class may be subject to emergency call-out and must be willing to work overtime and scheduled stand-by as required. 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 education, training, and experience equivalent to graduation from high school or GED. Five years' work experience in the performance of journey-level maintenance mechanic functions and skills; **OR** two years' work experience as a Water Treatment Plant Maintenance Specialist II with the City of Mesa.

**Special Requirements:**

***Brown Road Water Treatment Plant Assignment:*** Must possess a Grade II Water Treatment Plant Operator Certification from the Arizona Department of Environmental Quality (ADEQ) **OR** equivalent certification from another state through reciprocity with Arizona by application date. Certification through reciprocity must be obtained within 3 months of hire or promotion. Must obtain forklift operator certification within 6 months of hire. Must possess a valid Arizona Driver's License by hire date. Must meet the qualifications to wear a tight fitting respirator by passing a medical evaluation in accordance with Code of Federal Regulations (CFR) 1910.134 by hire or promotion date and must maintain certification. Must meet the physical standards and requirements for the wearing of an Air Purifying Respirator (APR) and a Self-Contained Breathing Apparatus (SCBA) respiratory protection equipment. This class shall be responsible for acquiring a minimum of 30 professional development hours (PDH's) every three (3) years to maintain their ADEQ Certification. The incumbent must also obtain a 40-hour HazWoper Certification as per the Occupational Safety and Health Act (OSHA), and must attend an 8-hour HazWoper refresher course annually to maintain certification.

***Water Supply Unit Assignment:*** Must possess a Grade II Water Distribution Operator and Grade II Water Treatment Plant Operator Certification from the ADEQ by application date. Must possess a valid Arizona Driver's License and a valid Arizona Class A Commercial Driver's License (CDL) with HazMat endorsement by hire or promotion date. Must meet the physical standards and requirements for the wearing of APR respiratory protection equipment. Must meet the qualifications to wear a tight fitting respirator by passing a medical evaluation in accordance with CFR 1910.134 by hire or promotion date and must maintain certification. This class shall be responsible for acquiring a minimum of 30 PDH's every three years to maintain their ADEQ Certification. The incumbent must also obtain a 40-hour HazWoper Certification as per the OSHA, and must attend an eight-hour refresher course annually to maintain certification.

**Substance Abuse Testing.** Certain positions within this class are subject to Department of Transportation (DOT) Federal Motor Carrier Safety Administration (FMCSA) drug and alcohol testing as outlined in 49 CFR Part 382 (by assignment).

**Preferred/Desirable Qualifications.** Experience as a Water Treatment Plant Operator. Considerable (3 - 5 years) journey-level experience associated with a water treatment plant and/or water treatment equipment maintenance, or experience in the maintenance and repair of municipal water distribution systems.

**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 verbally and in writing with City employees, management, and the public in order to provide information on water treatment operations, and water distribution and sewage collections system. Communicates verbally and in writing with other maintenance staff in order to provide training and direction. Provides information to contractors and vendors to ensure that maintenance and repairs are performed correctly. Maintains safety logs and reports for tracking purposes and provides this information to Safety Services.

**Manual/Physical:** Inspects work performed by other maintenance or plant personnel to ensure that work is being completed in compliance with project specifications and standards. Brown Road Water Treatment Plant incumbents operate a City vehicle requiring a standard Arizona Driver's License in order to drive to and from job sites at the plant. Water Supply Unit incumbents operate City vehicles requiring a standard Arizona Class A Commercial Driver's License with endorsements in order to transport hazardous chemicals. Wears a respirator in order to comply with safety standards when working in confined spaces and/or around toxic chemicals. Paints various pieces of equipment, stairways, shelves, cabinets, etc., using epoxy, enamel, and latex paints. Pushes, pulls, carries, and lifts objects weighing up to 100 pounds with an aid to assist. Works at heights of up to 150 feet and depths of 50 feet. Assists in new site construction for deep wells, sewage lift stations, and booster stations. Follows construction plans and blueprints. Installs, maintains, and/or replaces fluoride pumps at reservoir sites. Operates a variety of construction equipment and vehicles including a boom truck, backhoe, dump truck, electric hoist, trencher, forklift, cement mixer, welder, cutting torch, oxyacetylene welding torch, a welding machine, hot air gun, pipe threader, water main tamper, paint sprayer, hand tools, and other related tools in order to complete maintenance and repair duties. Changes chlorine bottles at automatic chlorinator site, or one-ton chlorine containers at the Brown Road Water Treatment Plant. Lays conduit and pulls wire for electrical needs. Applies welding and metal fabricating techniques and procedures to the maintenance and repair of equipment, the installation of sight gauges on tanks, and to construct safety guards, supports, kick plates, platforms, shelving, cabinets, work tables, etc. Performs pipefitting and plumbing by cutting, threading and welding pipe. Installs, maintains, repairs, and replaces pumps, compressors, motors, and related equipment. Performs preventive maintenance tasks, such as changing oil, lubricating bearings, replacing oil seals, gaskets, springs, gears, and related maintenance work. Mixes and pours concrete for pump bases and pipe support. Performs plaster wall surfacing duties. Meets scheduling and attendance requirements.

**Mental:** May provide leadership to subordinate maintenance staff and coordinate section activities in the absence of the Maintenance Supervisor. Monitors inventory and notifies supervisor as supplies and parts are needed. Learns plant maintenance operation and new repair techniques through on-the-job training. Reads and interprets water and sewer plat maps. Learns new techniques for installing and maintaining plant and water supply equipment, including pumps, variable speed drives and related equipment, through classroom training and on-the-job training.

**Knowledge/Skills/Abilities:**

Knowledge of:

oxyacetylene welding techniques and procedures;  
stainless steel, aluminum, and polyvinyl chloride (PVC) welding, and metal fabricating techniques and procedures;  
American Welding Society (AWS) and American Society of Mechanical Engineers (ASME) codes and requirements;  
installation, maintenance, and repair procedures for pumps, valves, rapid mixers, drive units, chlorinators, and other equipment associated with a water treatment plant or water supply and sewage collection system;  
pipefitting techniques and procedures;  
methods, practices, and materials used in the mechanical trades;  
occupational hazards and safety procedures associated with confined space entry, mechanical

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maintenance, welding, fluoride, methane gas, hydrogen sulfide, ferrous chloride, and chlorine gas;  
water flow meters;  
plumbing methods, practices, and materials;  
basic methods and practices used in the electrical trades;  
carpentry and painting techniques and practices;  
concrete repair;  
personal computers and related software, plant Supervisory Control and Data Acquisitions Systems (SCADA), and  
Computer Maintenance Management Software (CMMS).

Skills in:

the use and care of an oxyacetylene welding torch, a welding machine, hot air gun, propane torch, drill press, band saw, metal grinder, paint sprayer, and other equipment necessary to perform assigned tasks;  
the use of precision measuring equipment, including micrometers, dial indicators, and strain gauges; and  
the use and care of hand tools necessary to perform various mechanical installation, maintenance, and repair tasks.

Ability to:

use a respirator or SCBA;  
follow oral and written instructions;  
establish and maintain effective working relationships with coworkers and supervisors;  
learn to operate a variety of equipment, including an overhead crane, forklift, and boom truck; and  
establish and maintain effective working relationships with coworkers and supervisors.

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

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IND-7520

JOB FCTN-TEC

INCREMENTS 82-200

PAY GRADE: 45

SWORN-No