WATER PLANT MAINTENANCE SPECIALIST I

JOB DESCRIPTION

Classification Responsibilities: The Water Plant Maintenance Specialist I is a trainee classification in which the incumbent learns to perform specialized work involving the installation, maintenance, and repair of water treatment equipment and facilities, wastewater lift stations, odor control facilities, or water pump systems (depending on assignment). Incumbents may be assigned to either the Wastewater Collections Unit or to the Water Supply Unit. An employee in this class accompanies and observes a lead person, specifically the Water Plant Maintenance Specialist II and/or III class, thus performing daily activities and assisting in performing entry-level plant, wastewater collections, and/or water pump system maintenance work. Some examples of duties learned and performed include: 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 equipment and facilities, including but not limited to: pumps, compressors, pipes, aeration/mixer equipment, chlorine equipment, including gaseous and/or on-site generation; chemical analyzers and dosing equipment, valves, gear boxes, tanks, and swing arms, etc. These duties may vary depending on assignment to the Wastewater Collections Unit or the Water Supply Unit. As the incumbent demonstrates the ability to perform the full-range of the proposed Water Plant Maintenance Specialist II duties, the complexity and difficulty of assignments will increase. This class performs related duties as required.

Distinguishing Features: This class is distinguished from the Water Plant Maintenance Specialist II class by its responsibility for performing entry-level wastewater collections or water system maintenance duties while learning to perform journey-level wastewater collections or water system maintenance. This class is provided leadership and direction by a Water Plant Maintenance Specialist II or III and/or a Water/Wastewater Utility System Crew Leader, thus performing with supervisory responsibility provided by the Water/Wastewater Field Supervisor 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, ferrous chloride, raw sewage, toxic chemicals, and high-voltage lines, confined space, and equipment. Employees in this class may progress to the Water Plant Maintenance Specialist II class by noncompetitive promotion upon meeting the specific criteria-based promotion requirements of experience, training, and performance. 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 as required. Incumbents must be willing to work scheduled stand-by. 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.

Wastewater Collections Unit Assignment: Any combination of training, education, and experience equivalent to graduation from high school or GED. One year of experience performing wastewater odor control and/or lift station equipment maintenance, water or wastewater plant equipment maintenance,
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Water supply system equipment maintenance, or other mechanical or manufacturing equipment maintenance.

**Water Supply Unit Assignment:** Any combination of training, education, and experience equivalent to graduation from high school or GED. One year of experience performing water or wastewater plant equipment maintenance, water supply system equipment maintenance, or other mechanical or manufacturing equipment maintenance; OR nine months of experience as a Water Plant Maintenance Specialist Intern - Water Supply with the City of Mesa.

**Special Requirements.**

**Wastewater Collections Assignment:** Must obtain a Grade I (or higher) Wastewater Collection Operator certification from the Arizona Department of Environmental Quality (ADEQ) within 1 year of hire or promotion date. Must possess a valid Arizona Driver's License and a valid Arizona Class A Commercial Driver's License (CDL) Instructional Permit with Tanker endorsement by application date. The skills demonstration portion of the CDL test must be completed within 120 days of hire date and will be administered by a City of Mesa Third Party Tester. 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) respiratory protection equipment by hire or promotion date and must maintain certification. Work is physically demanding, and the employee must be capable of frequent lifting and carrying of heavy (50 - 75 pounds) equipment and materials with an aid to assist; and considerable bending, stooping, and climbing associated with working in wastewater collection systems and confined spaces. This class shall be responsible for acquiring a minimum of 30 professional development hours (PDH's) every three years to maintain their ADEQ Certification. The incumbent must also obtain a 40-hour HazWoper Certification as per the Occupational Safety and Health Administration (OSHA), and must attend an annual HazWoper refresher course to maintain certification.

**Water Supply Unit Assignment:** Must obtain a Grade I (or higher) Water Distribution Operator or Water Treatment Plant Operator certification from the ADEQ within 1 year of hire or promotion date. Must possess a valid Arizona Driver's License and a valid Arizona Class A CDL Instructional Permit with HazMat endorsement by hire date. The skills demonstration portion of the CDL test must be completed within 120 days of hire date and will be administered by a City of Mesa Third Party Tester. 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. Must meet the physical standards and requirements for the wearing of an APR respiratory protection equipment by hire or promotion date and must maintain certification. This class shall be responsible for acquiring a minimum of 30 PDHs every three years to maintain their ADEQ Certification. The incumbent must also obtain a 40-hour HazWoper Certification as per OSHA and must attend an annual HazWoper refresher course to maintain certification.

**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. 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.** 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 verbally and in writing with City employees, management, and the public in order to provide information on water distribution and sewage collection system. 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:**

**Wastewater Collections Unit Assignment:** Incumbents operate City vehicles requiring a valid Arizona Class A CDL with Tanker endorsement in order to maintain the wastewater collection system, including odor control facilities, lift stations diversion structures and forcemains. Wears respiratory protection equipment in order to comply with safety standards when working in confined spaces and/or around toxic chemicals (example: hydrogen sulfide, ferrous chloride, peroxide and calcium nitrate). 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 the assistance of essential lifting equipment (example: cart, power winches, rigging equipment, etc.). Works at heights of up to 150 feet and depths of 50 feet. Assists in new site construction for sewage lift stations. Follows construction plans and blueprints. Learns to install, maintain, and/or replace chemical dosing pumps at odor control sites; operate 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, welding machine, hot air gun, pipe threader, tamper, paint sprayer, hand tools, and other related tools in order to complete maintenance and repair duties; apply 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.; perform pipefitting and plumbing by cutting, threading, and welding pipe; install, maintain, repair, and replace pumps, compressors, motors, and related equipment. Learns to perform preventive maintenance tasks such as changing oil; lubricating bearings; replacing oil seals, gaskets, springs, and gears; and related maintenance work. Mix and pour concrete for pump bases and pipe support; read meters in order to report usage for billing; install, maintain, and repair air release valves. Addresses customer requests. Meets scheduling and attendance requirements.

**Water Supply Unit Assignment:** Incumbents operate City vehicles requiring a valid Arizona Class A CDL with Hazmat endorsement in order to maintain the Water Supply facilities, including booster stations, well sites, Pressure Reducing Valve stations. Wears respiratory protection equipment in order to comply with safety standards when working in confined spaces and/or around toxic chemicals (example: chlorine gas). 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 the assistance of essential lifting equipment (example: cart, power winches, rigging equipment, etc.). Works at heights of up to 150 feet and depths of 50 feet. Learn techniques for construction of new water supply facilities. Follows construction plans and blueprints. Learns to install, maintain, and/or replace chemical dosing pumps at water supply facilities; operate a variety of construction equipment and
Vehicle vehicles including a boom truck, dump truck, electric hoist, trencher, forklift, cement mixer, welder, cutting torch, oxyacetylene welding torch, welding machine, pipe threader, tamper, paint sprayer, hand tools, and other related tools in order to complete maintenance and repair duties; apply 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.; perform pipefitting and plumbing by cutting, threading, and welding pipe; install, maintain, repair, and replace pumps, compressors, motors, surge tanks and related equipment. Learns to perform preventive maintenance tasks such as changing oil; lubricating bearings; replacing oil seals, gaskets, springs, and gears; and related maintenance work. Mix and pour concrete for pump bases and pipe support; read meters in order to report usage for billing; install, maintain, and repair air release valves. Addresses customer requests. Meets scheduling and attendance requirements.

**Mental:** Monitors inventory and notifies supervisor as supplies and parts are needed. Learns 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, wastewater collections, and water supply equipment, including pumps, variable speed drives, and related equipment, through classroom 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, wastewater collections, or water supply 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 maintenance, welding, fluoride, methane gas, hydrogen sulfide, ferrous chloride, and chlorine gas;
- water and wastewater flow meters;
- plumbing methods, practices, and materials;
- basic methods and practices used in the electrical trades; carpentry and painting techniques and practices; concrete repair; and

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;
follow oral and written instructions;
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.