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 and water pump systems. Incumbents are assigned to the Water Supply Unit. Some examples of duties performed include: conducting pump efficiency tests, vibration analysis, shaft alignment procedures and tests on wells and booster pumps; 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, gaseous/on-site generation chlorine equipment and facilities, valves, gear boxes, surge tanks/reservoirs, and swing arms, pressure reducing/surge anticipating valves, pump control valves; etc. This position creates, dispatches, reviews and closes daily work activities by using Computerized Maintenance Management Software (CMMS). Incumbents train and provide lead supervision over plant operators, other maintenance personnel, part-time employees, and other staff as needed. This class performs related duties as required.

Distinguishing Features: This class is distinguished from other Water Plant Maintenance Specialists by its responsibility for performing journey-level lead work in water system maintenance. This class is distinguished from the Water/Wastewater Field Supervisor class by supervisor classes having full responsibility for overseeing the entire staff. This position 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/Wastewater Field Supervisor. This class is supervised 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, other 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 is 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 performing journey-level repair or maintenance of pumps, water or wastewater plant equipment, water supply system equipment, or other mechanical or manufacturing equipment; OR two years’ work experience as a Water Plant Maintenance Specialist II with the City of Mesa.

Special Requirements. Must possess Grade II (or higher) Water Distribution Operator and Water Treatment Plant Operator certifications from the Arizona Department of Environmental Quality (ADEQ) or equivalent certifications from another state through reciprocity with Arizona by application.
date. Certifications through reciprocity must be obtained within 3 months of hire or promotion. Must possess a valid Arizona Driver's License and a valid Arizona Class A Commercial Driver’s License (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 physical standards and requirements for the wearing of an Air Purifying Respirator (APR) respiratory protection equipment. 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. 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 annual refresher course 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 mechanic in a water treatment plant. 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 supply and treatment operations. 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 and to City of Mesa Specifications. 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. Incumbents operate City vehicles requiring a standard Arizona Class A CDL with Hazmat 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 and booster stations. Follows construction plans and blueprints. Installs, maintains, and/or replaces chlorine injection equipment at wells, pump stations and reservoir sites. Operates a variety of construction equipment and vehicles including a boom truck, electric hoist, welder, cutting torch, oxyacetylene welding torch, a welding machine, pipe threader, paint sprayer, hand tools, and other related tools and power equipment in order to complete maintenance and repair duties. Transports and exchanges chlorine cylinders at disinfection facilities. 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. Supervises construction of pump bases and pipe support. 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. Observes progress of Water Resources Capital Improvement Projects by attending meeting and site visits. Learns new techniques for installing and maintaining water supply equipment, including pumps, chemical treatment facilities and related equipment, through classroom and on-the-job training. Interfaces with customers and responds to customer service calls.

**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, drive units, chlorinators, and other equipment associated with a water treatment or water supply facilities;
- 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 and chlorine gas;
- plumbing methods, practices, and materials;
- basic methods and practices used in the electrical trades; carpentry and painting techniques and practices; and
- 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 shaft laser alignment/equipment, micrometers, dial indicators, vibration analyzer/vibration analysis, pH/chlorine analyzer maintenance and calibration, 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 verbal and written instructions;  
establish and maintain effective working relationships with coworkers and supervisors;  
learn to operate a variety of equipment, including an overhead crane, 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.