

## WATER PLANT OPERATIONS SUPERVISOR

### JOB DESCRIPTION

**Classification Responsibilities:** The Water Plant Operations Supervisor is a working supervisor who supervises the Operational staff and directs plant treatment operations, as well as being subject to shift rotations as circumstances and emergencies may require. This position is responsible for supervising, training, and directing Water Resources Operator I & II's, as well as Water Treatment/Reclamation Plant Operator Interns in order to ensure efficient, safe, and economical treatment of water. The position is responsible for meeting local, state, and federal requirements associated with operating the water treatment plant. Duties performed include: tracking monthly chemical usage to provide information to government regulatory agencies or the public; preparing comprehensive reports to provide information as required by local, state, and federal regulatory agencies or the public; reviewing comprehensive reports and providing detailed information and recommendations; compiling data to assist the Water Treatment Plant Superintendent in preparing the annual operating budget for the WTP; reviewing the operating expenditures of the facility and making corrections or providing detailed recommendations; maintains chemical inventory as required for the treatment plant and must complete a chemical report for the Water Resources Department monthly; conducting facility tours as required; and operating the Water Treatment Plant (WTP) when other operators are unavailable. The Water Plant Operations Supervisor must be able to review plans and specifications for treatment plant expansions and/or plant process improvements. This position is subject in providing leadership and coordination for the water treatment plant in the absence of the Water Treatment Plant Superintendent. This class is responsible for performing related duties as required.

**Distinguishing Features:** The Water Plant Operations Supervisor is required to provide training relative to regulations in water quality and the Occupational Safety and Health Administration (OSHA) and must annually update OSHA required documentation for the Water Resources Operators. This position also has the responsibility to maintain the facilities Risk Management Program (RMP) and serve as a point of contact on associated issues. The Water Plant Operations Supervisor is responsible for scheduling the 40-hour HazWoper course for plant operators. Also, the Water Plant Operations Supervisor coordinates the 8-hour refresher courses for the Operations staff. This class exercises initiative and independent judgment in performing assignments. The work requires occasional heavy lifting and carrying (up to 100 pounds with the assistance of a cart, power winches, rigging equipment, etc.) and includes such job hazards as exposure to toxic chemicals and chlorine gas. In addition, work is performed under adverse weather conditions. Supervision is received from the Water Treatment Plant Superintendent who evaluates work through daily discussions, meetings, reports, and performance evaluations of results achieved. 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.** Any combination of training, education, and experience equivalent to an Associate's Degree from an accredited college or university in Water Technology, Water Quality Management, or a directly related field. Four (4) years progressively responsible experience in the

operations and maintenance of a surface water treatment plant, with a minimum of two (2) years in a supervisory or lead worker experience.

**Special Requirements.** Must possess a valid Arizona Driver's License by hire date. Must possess a Grade IV Water Treatment Certification from the Arizona Department of Environmental Quality (ADEQ), **OR** equivalent certification from another state through reciprocity with Arizona application date. Certification through reciprocity must be obtained within 3 months of hire or promotion. The Water Plant Operations Supervisor shall be responsible for acquiring a minimum of 30 Professional Development Hours (PDH's) every three (3) years to maintain ADEQ Certification. Must meet the qualifications to wear a tight fitting respirator by passing a medical evaluation and a quantitative fit test in accordance with Code of Federal Regulations (CFR) 1910.134 by hire or promotion date and must maintain certification. A Water Plant Operation Supervisor must obtain a 40-hour HazWoper certification as per OSHA and must attend an 8-hour refresher course annually to obtain 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.

**Preferred/Desirable Qualifications.** Technical training and/or college courses in water technology, biology, chemistry, or sanitary engineering is preferred. Experience with advanced computerized systems utilized in water treatment facilities is also preferred. Experience in mechanical and electrical troubleshooting is desirable. Knowledge of laboratory and analytical methods used in the analysis of drinking water desirable. Knowledge of water treatment methods, procedures, and techniques; operations; preventive and corrective maintenance practices for water treatment facilities and equipment; computers and programs used in the operations of a water treatment plant; and knowledge and use of Supervisory Control and Data Acquisitions System (SCADA) monitoring and control systems.

## **ESSENTIAL FUNCTIONS**

**Communication:** Communicates with other City employees, vendors, engineers, contractors, water treatment plant visitors, and inspectors in order to explain operational data and technical information. Trains employees in water treatment plant operations and/or procedures, policies, and safety practices in order to comply with state and federal regulations. Prepares written documents such as the Standard Operating Procedures (SOPs), job hazard analysis, and other reports and records (which are submitted to county and state agencies for water treatment compliance) using clearly organized thoughts with proper sentence structure, punctuation, and grammar in written communication.

**Manual/Physical:** Monitors process controls, SCADA, and makes visual assessments to ensure proper plant operation. Monitors the mixing, flocculation, settling, and filtration equipment operations. The Water Plant Operations Supervisor is responsible for coordinating the medical surveillance exams for the operators. Operates valves, gates, and chemical feed rate, and mixes chemical solutions. Uses a variety of testing procedures to determine problems and make adjustments as needed in the treatment process. Operates laboratory equipment to perform respective water analysis. Distinguishes colors to determine the outcome of certain chemical analysis. Procures new laboratory equipment for the Water Resources Operators. Additionally, the position will be required as necessary to operate powered industrial vehicles which may include forklifts, front-end loaders, etc. This will require training

certification requirements per OSHA requirement 29 CFR 1910.178(1) on a three year basis. Cleans equipment and work area. Uses common hand tools such as: hammers, screwdrivers, and pliers to operate equipment and perform maintenance tasks. Works around or uses potentially hazardous materials requiring the use of specialized equipment. Lifts and carries heavy (up to 100 pounds with the assistance of a cart, power winches, rigging equipment, etc.) equipment, drums, and chemicals for distances of 20 feet or more. Enters data into computer workstation in order to calculate chemical usage. Uses an automated computerized maintenance management system in order to schedule, predict, and document plant maintenance activities. Operates a motor vehicle requiring a valid Arizona Driver's License to attend meetings and deliver materials. Meets scheduling and attendance requirements.

**Mental:** Plans, organizes, and directs the day-to-day operations of the water treatment plant. Supervises and evaluates the work of subordinate staff, specifically the Water Resources Operators. Checks chemical inventory and completes monthly and annual chemical reports. Prioritizes and assigns work to Water Resources Operators. Understands and interprets analytical data to make decisions to optimize water treatment processes. Develops database and/or spreadsheet applications to review statistical data on a daily basis. Performs mathematical calculations or statistical computations to determine the efficiency and effectiveness of operations. Develops techniques and record keeping to comply with federal, state, and county requirements. Comprehends and makes inferences of written materials including City and state regulations, literature, and plant procedures. Learns job-related material through on-the-job training.

**Knowledge and Abilities:**

Knowledge of:

water treatment plant operating procedures and policies;  
water treatment plant maintenance needs and procedures;  
OHSA regulations as they apply to water treatment personnel and OSHA guidelines related to large water treatment facilities;  
chemical/physical and biological processes used in water treatment processes such as: coagulation, flocculation, settling, sedimentation, filtration, disinfection, and solids handling;  
laboratory practices required to properly evaluate treatment processes such as: pH, jar tests, Cl<sub>2</sub> residual, ClO<sub>2</sub>, turbidity, hardness, total dissolved solids (TSS), total suspended (non-filterable) solids (TDS), disinfection by-products, fecal coliforms, and total coliforms;  
regulations which include the Safe Drinking Water Act, Enhanced Surface Water Treatment Rule, and Disinfectant/Disinfection By-Products Rule;  
programmable logic controllers that collect on-line data for plant operations;  
techniques, equipment, and terminology utilized in the water treatment industry;  
must exercise basic supervisory principles and practices; and  
basic employee training principles and practices.

Ability to:

plan, organize, direct, and review activities related to water treatment;  
plan and direct maintenance of computer operating records, compilation of data, and preparation of reports;

coordinate major equipment repairs and/or maintenance with the Water Plant Maintenance Supervisor, Utilities Control Center Supervisor, and Central Arizona Project;  
review all plans for upgrades, new construction projects, and replacement projects which affect the operation of the facility;  
direct new processes or techniques in order to maintain an efficient operation;  
resolve operational and procedural problems;  
develop and supervise the application of techniques and methods in various process controls to increase the efficiency of the facilities operation;  
prepare reports and compile data using a personal computer, spreadsheet software (Excel), and/or other related and applicable software;  
use laboratory equipment, analyze data, and make decisions concerning treatment techniques;  
hire, train, evaluate, and discipline employees;  
work closely with the Water Treatment Plant Superintendent in order to establish, maintain, and garner positive teamwork practices of the Water Resources-Water Utility Unit;  
review operations work through on-the-job inspections, conferences, and reports;  
perform all physical requirements of the position including lifting and carrying heavy (up to 100 pounds) objects; and  
establish and maintain effective communication and working relationships with other plant team members, vendors, inspectors, and the general public.

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

CS4636.DOCX

PAY GRADE: 49

EEO-SCW

IND-7520

JOB FCTN-TEC

SWORN-No

INCREMENTS 81-200