

## WATER TREATMENT PLANT SUPERINTENDENT

### JOB DESCRIPTION

**Classification Responsibilities:** A Water Treatment Plant Superintendent is responsible for: planning, directing, organizing, supervising, and controlling the plant operations, maintenance, and related water treatment plant functions. A Water Treatment Plant Superintendent ensures continuous staffing of the facility for 24 hours a day, 7 days a week and supervises professional and skilled workers (including, but not limited to: Water Plant Operations Supervisor, Water Plant Maintenance Supervisor, Water Resources Operators, and other maintenance, electrical, and laboratory staff). Responsibilities include: implementing computerized process control equipment and software; preparing and administering the budget for the unit (including capital purchase items, chemical usages, chemical costs, power costs and equipment replacement); reviewing technical specifications; ordering chemicals; training subordinates; and preparing complex oral and written reports on plant operations, water quality, water usage forecasts, and other plant information. The Water Treatment Plant Superintendent reviews federal Environmental Protection Agency (EPA) and Arizona Department of Environmental Quality (ADEQ) regulations to: ensure compliance for the water treatment plant; develop and update emergency evacuation plans; and prepare and develop a safety program which includes written standard operating procedures, job safety analysis, a written chemical hygiene plan, and a “right to know” program. The incumbent coordinates raw water deliveries with the Utilities Control Center and Central Arizona Water Conservation District (CAWCD) and prepares and develops specifications for annual bids for water treatment chemicals which meets federal, state, and industry standards. Other duties include: reviewing ongoing treatment plant construction plans and specifications; monitoring construction to ensure successful operation of the plant; and facilitating public relations activities for various groups. This class performs related duties as required.

**Distinguishing Features:** This position is given considerable latitude for independent judgment and decision-making in order to ensure compliance with federal and state drinking water standards. The employee is responsible for maintaining a safe working environment which complies with federal, state, and City guidelines. This class is supervised by the Water Resources Assistant Director through meetings, conferences, reports, and results achieved. This class is FLSA exempt-executive.

### 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 an accredited college or university with a Bachelor’s Degree in Sanitary Engineering, Environmental Engineering, Chemical Engineering, Civil Engineering, Chemistry, Biology, Microbiology, or related field. Extensive (5+ years) professional-level experience at an advanced, large (at least 30 mgd) potable surface water treatment facility, including three years as a plant manager or supervisor.

**Special Requirements.** Must possess and maintain a Grade IV Water Treatment Operator Certification from ADEQ, or equivalent from another state, by application date. If equivalent certification is from

another state, the incumbent must obtain a Grade IV Water Treatment Operator Certification from ADEQ within three months of hire/promotion. Must possess a valid Arizona Driver's License by 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.** Three years of experience with advanced treatment at a large water treatment plant, similar in complexity to the City of Mesa, and in a position equivalent to the City of Mesa's Plant Superintendent position, which oversees operations, maintenance, and regulatory compliance functions. Experience with advanced computerized systems such as Supervisory Controls and Data Acquisition (SCADA).

## **ESSENTIAL FUNCTIONS**

**Communication:** Communicates with the general public, other City employees, vendors, management contractors, engineers, and consultants in order to provide technical information, review related material, and maintain adequate drinking water standards. Conducts tours and facilitates public relations for various groups, including new employee orientation tours, school tours, contractor tours, and international visitors with City of Mesa management staff. Communicates with regulatory agencies to ensure compliance with applicable regulations. Instructs staff or other water supply professionals regarding safety topics and other treatment-related information. Prepares written documents, annual chemical bids, equipment specifications, monthly reports of specific information, memos, and training manuals to purchase chemicals, equipment, etc., to satisfy federal regulations and provide training and information.

**Manual/Physical:** Reviews the work products of others to ensure compliance with standard operating procedures, federal regulations (including Occupational Safety Health Administration [OSHA] rules, security, emergency management, chemical hygiene plans, and EPA requirements). Operates a personal computer (PC) to prepare complex narrative and statistical reports for management, such as, but not limited to: plant operations, water quality, chemical usage, pump efficiency, and equipment replacement and repair needs to access information for tracking or monitoring, and to input highly technical and budgetary data. Inspects plants to verify facilities are maintained properly and operating at maximum efficiency and that water treatment is efficient and economical. Researches and evaluates requirements for commodities, services, personnel, and training needs. Operates a motor vehicle requiring a standard Arizona Driver's License to drive between facilities and complete job assignments.

**Mental:** Directs, plans, and organizes the operations, maintenance, and quality control laboratory of the water treatment plants. Supervises professional and skilled trades staff, and completes employee evaluations, training, and development of staff members. Resolves procedural, operational, or other work-related problems through instruction, conference, and collection of data. Prepares and develops plant training, safety, and operational procedures. Conducts research or analyzes data such as water quality data, chemical cost data, production data, chemical use date, sludge volume, etc., to determine equipment needs and process modifications, optimize chemical feeding, and reduce sludge production and related items to reduce costs. Reviews and interprets blueprints, schematic and mechanical

drawings, and layouts to review expansion of treatment plants, comprehend system functions, and make recommendations to design engineers.

**Knowledge and Abilities:**

Knowledge of:

materials, methods, practices, and equipment used in water treatment, storage, operation, and construction;  
functions and mechanics of water treatment plant machinery and equipment, and routine and emergency service and maintenance requirements;  
water treatment processes including chemical treatment, filtration, and standard methods of sampling and analysis of water;  
principles, practices, and procedures of employee supervision training, and evaluation;  
function and operation of a SCADA system;  
methods and practices used in sludge reduction;  
elements of construction technology and civil engineering as related to assigned construction and expansion projects;  
hazards and safety precautions of the work environment; and  
principles and practices of budget preparation, administration, and expenditure monitoring.

Ability to:

operate a PC, on-line plant system monitoring, and specialized software;  
supervise, train, assign, and evaluate the work of plant operations and maintenance staff;  
read, interpret, and implement federal, state, and City guidelines and technical requirements, including issues with water quality liability;  
prepare comprehensive and detailed reports required by state and federal agencies;  
prepare and implement emergency plans;  
assist in the investigation of work related accidents and ensure practice of safe work procedures;  
review and interpret drawings, specifications, and reports related to water treatment facilities;  
identify design needs and determine if engineering designs meet facility needs and if specifications meet expectations;  
calculate statistical data to evaluate plant processes and laboratory data; and  
establish and maintain effective working relationships with subordinates management, coworkers, officials 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

CS4814.DOCX

PAY GRADE: 57

EEO-Prof

IND-7520

JOB FCTN-ADM

SWORN-No

INCREMENTS 81-200