

CENTRAL UTAH WATER CONSERVANCY DISTRICT  
Job Description  
Revised: April 2018

JOB TITLE: Water Systems Technician

REPORTS TO: Treatment Plant Manager

STATUS: Non-Exempt

**JOB SUMMARY:**

This position is responsible for operations and maintenance of a drinking water treatment plant and public water system, which requires safeguarding public health, and providing high quality drinking water in a cost effective and efficient manner.

**ESSENTIAL FUNCTIONS:**

1. Operates and maintains a water treatment plant which requires the knowledge, skill and ability to utilize, troubleshoot and calibrate various electrical equipment - including: chemical feed systems, computers, PLC's, I/O cards, turbine pumps, motors (AC & DC), valves, and analytical devices (turbidimeters, pH meters, etc.)
2. Monitors plant SCADA system and makes necessary real time operational changes with respect to chemical feed rates and dosages, plant flow rates, treated water reservoir levels, proper valve adjustments, and appropriate unit process placement per a given flow rate.
3. Evaluates raw water quality and preserves finished water quality by making independent decisions and timely adjustments to chemical dosages and plant processes.
4. Evaluates finished water quality and makes necessary operational changes to ensure water entering the distribution system meets all Organization, State and Federal guidelines.
5. As a trained and certified lab technician, performs laboratory tests and analyses such as: Ph, alkalinity, hardness, total dissolved solids, conductivity, color, turbidity, chlorine residuals, and bacteriological analysis.
6. Monitors plant security systems and District remote site facilities and responds appropriately.
7. Operates, monitors, maintains, detects and controls the chlorine feed system and responds to any chlorine leak in a safe, responsible manner.
8. Operates and maintains the plant's dual-media filters by regulating proper filtration rates, backwash procedures, media evaluation, and managed filtration techniques.
9. Works rotating shifts when required, weekends and holidays and on-call, as scheduled.

10. Records and organizes water quality data using computer word processing and spreadsheet software for regulatory compliance information and communication.

#### MARGINAL FUNCTIONS:

1. Performs various janitorial, painting and grounds maintenance duties.
2. Performs other related duties as assigned.

#### REQUIREMENTS:

Ability to operate a SCADA system which involves monitoring computer equipment, and/or reading flow charts and making the necessary flow changes by turning and/or pressing buttons, switches, etc.

Ability to operate various equipment, i.e., hoist, crane, respirator, hoses, and plant instrumentation which involves pushing, pressing, pulling, fingering, grasping buttons, levers, switches, etc.

Ability to pull water samples and check turbidity levels; ability to smell for odors when conducting odor tests.

Ability to troubleshoot various plant operation problems which arise during shift rounds; to move about to inspect plant; to move quickly to respond to an emergency situation.

Ability to use a passive vocabulary of 5,000-6,000 words; to read at a slow rate; to read instructions, logs, safety rules, material safety data sheets, etc.

Ability to write or type (inscribe by whatever means) data into a manual or on a computer spreadsheet.

Ability to perform repetitive work; to continuously perform the same work according to set procedures.

Ability to follow instructions; receive guidance and supervision; follow work rules, safety practices, work procedures; punctuality and attendance standards.

Ability to work rotating shifts and weekend work and/or ability to work on-call and respond to call-backs and arrive in a physical and mental condition to evaluate, repair, troubleshoot problems; to work overtime as required.

Ability to be subject to hazards: This includes a variety of physical conditions, such as proximity to mechanical equipment, exposure to heat and cold, or exposure to chemicals (airborne and/or skin exposure) including chlorine, potassium permanganate, caustic soda, carbon, and alum.

Ability to inspect equipment, check chemical levels, check for water leakage, monitor water quality, take instrumentation readings from flow charts, gauges, etc.; investigate alarms indicating water leaks, air pressure reductions, correct flow levels, intrusion alerts, etc.

Ability to exercise close vision and adjust focus in reading gauges, performing minor chemical tests; color vision required in performing titration tests and in observing potassium permanganate content, and to

determine type of plant emergencies by alarm light colors; peripheral vision required in monitoring master control system; depth perception required when climbing down into tanks, hatches, etc.

Ability to extend out and retrieve objects outside immediate range.

Ability to work in confined spaces, i.e., pipes, hatches, etc.

Ability to climb; to ascend or descend ladders, stairs, poles and the like, using feet and legs and/or hands and arms; ability to balance to prevent falling when walking.

Ability to stoop, kneel, crouch, crawl to inspect and clean pipes, equipment, etc.

Ability to lift; to raise objects from a lower to a higher position or moving objects horizontally from position-to-position.

Ability to wear a respirator; to operate it according to established procedures.

Ability to perform backwashing sequence.

Ability to work independently with minimal or no supervision (during various shifts).

Ability to adapt to situations requiring the precise attainment of set limits, tolerances, or standards; to be precise, thorough, exacting, or meticulous in regard to material worked; or in activities such as numerical determinations, record preparations, or inspecting.

Ability to exchange information with others, i.e., outside agencies, by telephone in a clear and concise manner; to present facts and technical information.

Ability to exert up to 50 pounds of force occasionally, and/or up to 20 pounds of force frequently, and/or up to 10 pounds of force constantly to move objects.

#### EDUCATION/EXPERIENCE/LICENSE/CERTIFICATION:

High School diploma or equivalent plus two years college education related to job tasks or an equivalent combination of education and experience (preference given to applicants with electrical and/or instrumentation skills, computer networking, or science and laboratory experience). Must obtain a State of Utah Grade IV Water Treatment Certification within one year of hire date.