



CENTRAL UTAH WATER CONSERVANCY DISTRICT

Job Description

Revised: February 2025

JOB TITLE:	Water Systems Technician
REPORTS TO:	Treatment Plant Manager
DEPARTMENT:	Finished Water
LOCATION:	AVWTP, Vernal, UT
STATUS:	Non-Exempt
SALARY GRADE:	9

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

Essential & other important responsibilities & duties may include, but are not limited to, the following:

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. Operates and maintains the plant's dual-media filters by regulating proper filtration rates, backwash procedures, media evaluation, and managed filtration techniques.
6. Monitors plant security systems and District remote site facilities including dams, diversion structures and responds appropriately.
7. Feeds, monitors, maintains, detects, and controls the chlorine feed system and responds to any chlorine leak in a safe, responsible manner.
8. 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.
9. Works rotating shifts, 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.

SUPERVISION RESPONSIBILITIES

No supervisory duties required.

KNOWLEDGE, SKILLS, AND ABILITIES (KSAs)

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

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.

PHYSICAL DEMANDS & WORKING ENVIRONMENTS

The physical demands and working environment demand described here are representative of those that must be met by an employee to successfully perform the essential functions of this class. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential job functions.

Environment:

Works indoors and outdoors; often work is in conditions of extreme cold (below 32 degrees) and in conditions of extreme heat (above 95 degrees) up to 3-4 hours or more.

Work requires responding to call-outs during evening hours, early mornings, weekends and/or holidays for emergency situations or flow changes; to work 40 or more hours during the work week as needed to complete tasks in a timely manner.

Physical:

Requires sufficient mobility to walk, stand, and sit for prolonged periods of time, to climb stoop, bend, kneel, crouch, crawl, reach, and twist; push, pull, lift, exert up to 100 lbs. of force/weight occasionally, and/or more than 50 lbs. of force frequently to move and/or carry objects when working in vaults, pipelines, canals, mountainous and/or uneven surfaces or terrain.

Work tasks may be performed in confined spaces including pipes, tunnels, hatches, vaults, etc.

Demonstrate adequate hearing and speech to converse in person and by phone. Exercise vision to read printed materials and use a computer screen. Periodically may drive to various meetings, appointments, etc. Position may require the ability to work overtime and on weekends/holidays.

QUALIFICATIONS

Required to meet a combination of Experience/Education/Certification/License/Training in the following.

1. High School diploma or equivalent plus 2 years college education in related field.
2. Preference given to experience related to job tasks (electrical, instrumentation, mechanical, chemistry or biology skills and experience).
3. Must obtain State of Utah Grade IV Water Treatment Certification within 1 year of hire.
4. Valid Utah Driver's license with satisfactory driving record (MVR).