



Ute Water Conservancy District Job Description

Job Title:	Water Quality Chemist
Job Code:	Professional/Technical
Salary Range:	\$38.13 – \$58.66 hourly
Location:	Onsite, 3975 Rapid Creek Road, Palisade, CO 81526
Department:	Treatment & Source
Reports To:	Laboratory Manager
FLSA Status:	Exempt
Compensation Factor(s):	Education, Training & Experience; Merit System; Seniority
Prepared Date:	January 2021
Revised Date:	May 2026

SUMMARY

This position reports to the Laboratory Manager and is responsible for performing professional-level chemical and bacteriological water quality duties and responsibilities to support the water quality laboratory programs in pursuit of the District's objectives by performing the following duties.

ESSENTIAL DUTIES AND RESPONSIBILITIES

Performance of duties follows standards, policies, and plans established by the District as well as applicable federal, state, and local regulations.

Laboratory Operations and Technical Analysis

- Perform sampling and analysis in accordance with the District's Monitoring Plan and Colorado Primary Drinking Water Regulations.
- Perform professional-level chemical, bacteriological, and physical water quality analyses in support of laboratory and treatment programs.
- Weigh out and add method specific preservatives to sample vials and collected samples.
- Prepare compliant sample collection kits for shipping to various entities so that collected and returned samples meet compliance standards.
- Operate laboratory instruments and equipment with accuracy and precision, including GC, GC/MS, IC, ICP-MS, and TOC analyzers.
- Conduct testing using approved EPA and Standard Methods, including but not limited to EPA 524.3, 552.2, 300.0, 200.8, SM 5310.
- Produce compliance and special-purpose analytical data to support District efforts.
- Perform complex chemical, mathematical, and statistical calculations to evaluate analytical results and identify potential problems.

- Maintain clean and organized work areas.

QA/QC and Method Development

- Comply with and support laboratory QA/QC programs.
- Conduct and pass required proficiency exams annually to ensure valid Laboratory certification.
- Prepare for and participate in CDPHE Laboratory audits and Sanitary Surveys as required.
- Maintain knowledge and records of sample holding times, preservatives, and preparation requirements to ensure regulatory compliance.
- Troubleshoot analytical issues and recommend or implement corrective actions related to sampling, transport, storage, or testing.
- Diagnose equipment malfunctions and support instrument performance through routine maintenance and calibration of laboratory instruments to ensure data accuracy and regulatory compliance.
- Assist in reviewing and updating analytical methods; research, develop, and implement new methods as needed.
- Develop, review, revise, and follow Standard Operating Procedures (SOPs).

Data Management, Documentation, and Reporting

- Maintain accurate and up-to-date records of sampling, analytical results, investigations, customer complaints, and corrective actions.
- Update spreadsheets and laboratory records with field and analytical data.
- Prepare compliance and noncompliance reports for review and submission.

Laboratory Administration

- Assist the Laboratory Manager with daily laboratory operations.
- Perform Laboratory Manager duties during absences or as assigned.
- Participate in budget development and provide recommendations for equipment and supply purchases.
- Track laboratory inventory, materials usage, and related documentation.
- Order laboratory supplies and assist with invoicing and consumable management.
- Maintain instrument calibration logs for both laboratory instruments and laboratory tools such as scales, pipets, and thermometers.

Treatment and Distribution Support

- Assist in monitoring and reporting water quality issues within the distribution system.
- Coordinate with District staff on activities such as flushing.
- Work with District staff to sample tanks, source water sites, designated sample stations, and customer locations as required.
- Collect and analyze routine distribution system samples, including weekly heterotrophic plate count (HPC) samples.
- Calibrate and maintain select online analyzers at the water treatment facility.

Safety and Chemical Management

- Work safely around chemicals and maintain a safe laboratory environment.



- Oversee and maintain the laboratory Safety Data Sheets (SDS) program.
- Update SDS records and notify Risk Management of changes.

Additional Essential Duties and Responsibilities

- Investigate water quality complaints, document findings, and ensure appropriate follow-up.
- Assist with cleaning of facilities and vehicles.
- Operates a motor vehicle.
- Operates a boat, off-highway vehicles, such as four-wheelers, side-by-sides, etc.
- Regular or continuous public contact. Interacts respectfully and professionally with all District employees, board members, and non-employees such as the public, customers, vendors, contractors, consultants, etc.
- Demonstrates reliable and consistent job attendance.
- Performs the essential functions listed on pages 1 to 6 of this job description.

GENERAL DUTIES

- General duties may be assigned. May assist in other areas as assigned.
- Management retains the discretion to change the duties of the position at any time.

MINIMUM QUALIFICATIONS AND REASONABLE ACCOMMODATION

To perform this job successfully, an individual must perform each essential duty, with or without reasonable accommodation, and all job requirements satisfactorily. The requirements detailed within this job description are representative of the knowledge, skills, certifications, licenses, registrations, and/or abilities required. Reasonable accommodation(s) may be made to enable individuals with disabilities to perform the essential duties and responsibilities. To request an accommodation, please contact the Human Resources Department. You may be asked to provide additional information, including medical documentation, regarding functional limitations and type of accommodation needed.

SUPERVISORY RESPONSIBILITIES

- This job has no direct supervisory responsibilities on a regular basis.
- Performs all essential functions and responsibilities of the Laboratory Manager during absences or as assigned.
- May direct the work of casual seasonal employee(s).
- When required, this position will perform supervisory responsibilities in accordance with the District's policies and applicable laws.

EDUCATION, EXPERIENCE, CERTIFICATES, LICENSES, and/or REGISTRATIONS

Required: Bachelor's degree from an accredited institution in chemistry, biology, or a science-related field.
A minimum of five (5) years of laboratory experience.
A valid Colorado Driver's License, in good standing, with insurability under District standards.
A valid State of Colorado Class "D" Water Treatment Operator certification or obtain such certification within two (2) years from the date of hire into the position.



Preferred: Water quality laboratory experience.
A valid State of Colorado Class C, B, or A Water Treatment Operator certificate.

Any equivalent combination of certifications, education, or experience that provides the required skills, knowledge, and abilities of the position.

LANGUAGE AND COMMUNICATION SKILLS

- Communicates in English.
- Both verbal and written communication skills are critical to this position.
- Read and understand local, state, and federal drinking water regulations.
- Read, analyze, and interpret complex test data and reports.
- Read, interpret, understand, and apply schematics, computer and equipment manuals, and blueprints.
- Communicates thoroughly and concisely with all District employees, board members, and non-employees.
- Provides professional presentations to District employees, board members, and non-employees.

COMPUTER SKILLS

- Proficient in the use of computers and mobile devices, including software such as Microsoft 365 and telecommunications platforms.
- Proficient in SPOT device and GPS unit.
- Familiarity with the District's ESRI web mapping platforms, including ArcGIS Field Maps.
- Familiarity with instrument software pertaining to laboratory certified methods such as Shimadzu, Method 524.3, etc.

MATHEMATICAL SKILLS

- Add, subtract, multiply, and divide in all units of measure, using whole numbers, common fractions, and decimals.
- Performs complex chemical and mathematical calculations and statistical analyses.
- Calculates chemical dosages, verifies instrument accuracy, computes basic lab tests, and applies concepts such as percentages, ratios, and proportions to situations involving the water treatment process and laboratory analysis.
- Calibrate water treatment facility and laboratory equipment and instrumentation in accordance with specification standards.
- Apply technical, mathematical, and chemistry concepts, including statistical analysis during testing procedures.
- Develop testing procedures based on principles of chemistry, biology, and microbiology using mathematical formulas.
- Works with mathematical concepts involved in water treatment, such as complex chemical calculations, dosage calculations, complex conversions, and dimensional analysis.



REASONING SKILLS

- Uses discretion and tact when interacting with all District employees, board members, and non-employees.
- Applies common sense and sound judgment to perform the job duties and responsibilities.
- Exhibits excellent organizational skills, takes initiative, and efficiently multi-tasks.
- Maintains attention to detail, concentration, focus, precision, and alertness while performing essential duties and responsibilities of the position.
- Define problems, collect data, establish facts, and draw valid conclusions.
- Works with a variety of variables to troubleshoot and solve intermediate to complex problems.
- Exercises discretion and independent judgment with respect to matters of significance in laboratory operations.
- Works methodically, quickly, and safely under pressure.

INTERPERSONAL SKILLS

- Displays excellent interpersonal skills and maintains rapport with all District employees, board members, and non-employees.
- Works independently and as part of a team in pursuit of the District's objectives, under tight timelines and in a professional manner.

PHYSICAL DEMANDS

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job for eight (8) hours or more per day.

- Regularly required to talk and hear.
- Frequently required to sit and work at a computer performing repetitive typing activities.
- Occasionally climbs into and out of water vaults, water tanks, goes up and down ladders and stairs.
- Occasionally climbs into or out of a variety of fleet vehicles and equipment, including off-highway vehicle, boat, and other types of vehicles or equipment.
- Frequently required to sit, stand, walk, climb stairs, climb ladders, use hands and fingers to handle, touch or feel, reach with hands and arms, bend, twist, stoop, kneel, crouch, crawl, and work at varying heights.
- Frequently lifts and/or moves up to 25 pounds and occasionally up to 50 pounds.
- Specific vision requirements include close vision, distance vision, color vision, peripheral vision, depth perception, and adjusting focus.
- This position must pass the required annual tests for the wearing of a respirator.
- Must perform all physical demands with or without reasonable accommodation.



WORK ENVIRONMENT

The work environment characteristics described within this job description are representative of those an employee encounters while performing the essential functions of this job for eight (8) hours or more per day.

- This job is performed in an office setting as well as outdoors in various weather conditions including extreme heat and extreme cold. Position works approximately 90% of the time indoors and 10% of the time outdoors.
- Occasionally exposed to loud noise, fumes, airborne particles, and toxic or caustic chemicals.
- Operates a motor vehicle, drives in all types of weather conditions, and works in close proximity to traffic.
- Travels throughout the watershed and distribution system to perform the essential functions of the position.
- Occasionally exposed to work at varying heights, including high, precarious places such as the tops of water tanks.
- Duties require working in remote areas and working alone.
- The noise level is usually moderate.
- Temporary telecommuting arrangements may be approved based on extenuating circumstances such as a pandemic, inclement weather, special projects, business travel, reasonable accommodation, or other reasons at the District's sole and absolute discretion and only when approved by the General Manager in a written remote work agreement.

SAFETY REQUIREMENTS

- This is a safety sensitive position subject to drug and alcohol screening.
- Employees are automatically enrolled and required to participate in the District's emergency communication platform.
- Follows safe work practices according to industry and District standards.
- Wears and uses personal protective equipment as required, including a full face respirator when necessary.
- Uses SPOT/GPS device when working in remote locations.
- Familiarity with Lock Out/Tag Out, Confined Space procedures, Hazardous Chemical Communication, and electrical safety is required.
- This position must pass the required annual tests for the wearing of a respirator.

HOURS

- This is an exempt position.
- Must work a 40-hour work week or as required based on workload demand.
- As assigned or needed, this position is required to be on-call and respond to emergency situations.

