

Water Treatment Technician - Entry Level

Position Details

Class Code: 7235

Job Family: Skilled Trades/Technicians

Classification: Support Professional

Terms of Employment: [Pay Grade 52 on the Support Professional Salary Schedule](#)

FLSA STATUS: NON-EXEMPT

Position Summary

Under direct supervision, the Water Treatment Technician – Entry-Level, assists in monitoring, analyzing, and testing water systems; assists in implementing preventive maintenance programs on building systems, including heating, ventilation, air conditioning, and refrigeration (HVACR), and hydronic equipment.

Essential Duties and Responsibilities

This list of Essential Duties and Responsibilities is not exhaustive and may be supplemented.

1. Assists in chemical testing water samples from cooling towers, chiller condensers, boilers, open/closed loop heating and cooling systems, and related subsystems.
2. Assists in chemical testing during system cleaning; determines chemical cleaning agent contact duration to prevent premature erosion of system metals.
3. Assists in testing water samples with specific procedures and equipment in cooling towers, boilers, and open/closed loop heating and cooling systems; ensures that acidity, alkalinity, and contaminant levels are within prescribed limits.

4. Assists in calculating concentration cycles, solutions, approach temperatures, and chemical treatment dosages.
 5. Assists in calculating the type and amount of algaecide/biocide to apply to cooling tower(s) to control or eliminate bacteria, algae, fungi, or biomass growth.
 6. Assists in calculating solution temperatures and flows using test equipment.
 7. Assists in analyzing chemical test data to calibrate water treatment control devices to regulate chemical flows into boilers, cooling towers, and heating/cooling systems to descale and eliminate algae/corrosion.
 8. Assists with installing automatic feed and bleed control devices for chemical injections into boilers, cooling towers, and closed loops; includes electric motors, wiring, and associated waterlines.
 9. Assists in repairing/replacing tubing, fittings, pumps, valves, regulators, controls, fan belts, and pulleys.
 10. Assists in chemically/manually cleaning cooling towers, condensers, or flat plate heat exchangers; determines severity of debris and proper chemical cleaning agent(s).
 11. Assists in acidizing/cleaning condensers and tube bundles to remove scale.
 12. Assists in starting/stopping cooling towers, chillers, boilers, and flat plate heat exchangers; blows-down boilers per established procedures.
 13. Assists in identifying/replacing malfunctioning components such as conductivity controller circuit boards, solenoid valves, etc.
 14. Assists in visually inspecting and performing preventive maintenance on associated equipment.
 15. Assists in ensuring that chemical inhibitors, suspended solids, chlorides, calcium, acidity, alkalinity, silica, and other contaminants are within established limits using prescribed testing procedures.
 16. Assists in requesting equipment, chemicals, test kits, and other supplies, as needed.
 17. Assists in preparing/maintaining records such as equipment statuses, concentration cycles, residual chemical contents, approach temperatures, and water pressures.
 18. Assists in safely, responsibly handling and disposing of hazardous waste relative to cooling towers, boilers, and water systems.
 19. Conforms to safety standards, as prescribed.
 20. Performs other tasks related to the position, as assigned.
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Distinguishing Characteristics

Involves work requiring substantial judgment and analytical ability regarding proper water treatment of industrial water systems.

Knowledge, Skills, and Abilities (Position Expectations)

1. Knowledge of safe handling practices for hazardous chemicals and waste material.
 2. Knowledge of water treatment practices/procedures.
 3. Knowledge of chemical cleaning to prevent equipment corrosion/damage.
 4. Ability to develop, learn, and apply spoken/written operating procedures.
 5. Ability to recognize, understand, interpret, and apply all local, state, federal and national codes/regulations, including Occupational Safety and Health Administration (OSHA), Uniform Building Code (UBC), Uniform Mechanical Code (UMC), Uniform Plumbing Code (UPC), Environmental Protection Agency (EPA), etc.
 6. Ability to wear prescribed safety/personal protective equipment.
 7. Ability to plan and organize work.
 8. Ability to safely handle and dispose of chemicals in accordance with material safety data sheets (MSDS), federal, state, and local jurisdictional requirements.
 9. Ability to operate hand/power tools and equipment.
 10. Ability to withstand heights and perform work safely.
 11. Ability to perform heavy, strenuous, physical work.
 12. Ability to work cooperatively with employees, vendors, and the public.
 13. Ability to recognize/report hazards and apply safe work methods.
 14. Possess physical and mental stamina commensurate with the responsibilities of the position.
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Position Requirements

Education, Training, and Experience

1. High school graduation or other equivalent (i.e., General Educational Development (GED), foreign equivalency, etc.)

2. Any combination of training and work history equivalent to two (2) years' experience in the operation, chemical maintenance, and control of open/closed HVACR industrial and water systems.

Licenses and Certifications

1. A valid driver's license that allows the applicant/employee to legally operate a motor vehicle in Nevada. License must be maintained for the duration of the assignment.
2. Copy of current driving history (dated within six (6) months from the date printed) issued by the Department of Motor Vehicles (DMV) at the time of application or Qualified Selection Pool (QSP) placement and at the time of interview prior to final selection.

Preferred Qualifications

College coursework in math, chemistry, biology, and water treatment.

Document(s) Required at Time of Application

1. High school transcript or other equivalent (i.e., GED, foreign equivalency, etc.)
 2. Copy of a valid driver's license that allows the applicant/employee to legally operate a motor vehicle in Nevada.
 3. Current copy of driving history (dated within six (6) months from date printed) issued by the DMV.
 4. Specific documented evidence of training and experience to satisfy qualifications.
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Examples of Assigned Work Areas

District facilities - offices, schools (mechanical equipment rooms, boiler/chiller rooms, cafeterias, cooling towers, building rooftops, etc.)

Work Environment

Strength

Medium/heavy - exert force of 50-100 lbs., occasionally; 25-50 lbs., frequently; 10-20 lbs., constantly.

Physical Demand

Frequent sitting, standing, walking, pushing, pulling, stooping, kneeling, climbing, crouching, reaching, handling, and repetitive fine motor activities. Mobility to work in a typical office setting and use standard office equipment. Stamina to remain seated and maintain concentration for an extended period of time. Hearing and speech to communicate in person, via video conference and computers, or over the telephone. Vision: Frequent near and far acuity, and color vision. Vision to read printed and online materials, a Video Display Terminal (VDT) screen, or other monitoring devices.

Environmental Conditions

Varies from climate-controlled office settings to work outdoors with temperatures ranging from mild/moderate to extreme cold/heat. Exposure to noise levels ranging from moderate to loud for occasional to frequent time periods.

Hazards

Furniture, playground/office equipment, communicable diseases, chemicals and fumes (as related to specific assignment), and power/hand-operated equipment and machinery (as related to specific assignment.)

Examples of Equipment/Supplies Used to Perform Tasks

District-issued/personal vehicles, safety/personal protective equipment (i.e., safety glasses, respirator, ear plugs, etc.), chemical testing kits (including hazardous and non-hazardous materials), electronic test equipment, electric hand tools (i.e., drills, saws, high pressure cleaners, air compressors, etc.), manual hand tools (i.e., wrenches, hammers, screwdrivers, knives, etc.)

AA/EOE Statement

The Clark County School District is proud to be an equal opportunity employer. The Clark County School District is committed to providing all applicants and employees equal employment opportunities without regard to race, color, religion, sex, gender identity or expression, sexual orientation, national origin, genetics, disability, age, military status, or other characteristics protected by applicable law. Here at Clark County School District, we are a diverse group of people who honor the differences that drive innovative solutions to meet the needs of our students and employees. We believe that through a culture of inclusivity, we have the power to reflect the community we serve.

Job Revision Information

- Revised: 07/25/23
- Created: 06/08/17