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**Water Treatment Operator Class A-D**

**Dated: JULY 2017**

**Minimum Qualifications**

**Operator I** – Knowledge of the occupational and safety precautions of the work. Skill in the operation and care of tools and equipment needed on the job. Ability to understand oral and written instructions and diagrams. Must have a Colorado State Driver's License.

**Operator II** – In addition to Operator I, have knowledge of the operating characteristics and maintenance requirements of a water treatment plant. Ability to inspect machinery and mechanical equipment in operation and detect flaws and see that appropriate corrective measures are taken. Must have the ability to perform water and laboratory tests. Ability to inspect works done by subcontractors to insure adherence to District policies and take corrective measure if necessary. Must have 1-3 years' experience as an **Operator I** and obtain a Colorado State Water Works Operator **Class D Certification** by demonstrating knowledge of basic principles of water treatment, chlorination procedures, bacteriological testing techniques and standards, department water quality standards, pumping and storage principles, and good housekeeping and safety practices.

**Operator III** – In addition to above certifications, knowledge of hydraulic, chemical and mechanical production principles relating to the operation of a water treatment plant. Ability to assist in the supervision of additional employees. Basic knowledge of blueprints and drafting. Ability to read and understand as-built drawings, plans, profiles, and maps. Must have 3-5 years as an **Operator II** and a Colorado State Water Works Operator **Class C Certification** by demonstrating knowledge of control procedures, including but not limited to the purpose, use, and procedures used for the basic chemical and physical, and biological tests.

**Operator IV** – In addition to the above-acquired knowledge, requires advanced knowledge of the principles and practices of water treatment, water chemistry, regulatory compliance and reporting. Requires 5-7 years' experience, including some supervisory experience, and a Colorado State Water Works Operator **Class B** or **Class A Certification** (higher is a plus), demonstrating knowledge of filter units, the principles of coagulation and sedimentation, the maintenance and safety of auxiliary equipment, and the principals of taste and odor control.

**Positions require the ability to be "on call" evenings, weekend, and holidays as required. All positions are to report any toxic or hazardous materials that enter waters of the State immediately to the Colorado Department of Public Health, and Environment.**

**Contacts**

Interacts with supervisor and peers to receive work assignments, address any administrative issues. Discusses and resolves technical issues. Some contact with the public and more with other personnel.

### **Physical Requirements**

Ability to perform fieldwork that requires walking extended distances that may also include steep terrain in all weather conditions. Type of work is very physical, such as: inspection of pump stations; locating raw water pump stations; locating lines and taps; repairing and maintaining of fire hydrants; checking on three storage tanks. Requires installation of pumps, gauges, motors, mechanical maintenance. Indoor work includes constant checking and recording information. Must be able to use a personal computer, keyboard and peripherals. Good eyesight, verbal and written communication skills are required.

- ◆ Constant exposure to sun
- ◆ Working in extreme low temperatures and/or high humidity environment
- ◆ Exposure to loud noise and vibration
- ◆ Walking on slippery and hard surfaces
- ◆ Exposure to airborne dust
- ◆ Bending kneeling, squatting; frequent walking on uneven surfaces
- ◆ Uses sense of vision, hearing and smell to diagnose problems
- ◆ Work on ladders, scaffolding and structures up to 36 feet in height
- ◆ Work in confined space or cramped body position
- ◆ Lifting of items weighing up to 50 pounds to level of waist
- ◆ Ability to read instructions and write information on reports
- ◆ Ability to shovel snow and/or dirt for extended periods
- ◆ Ability to hike in snow to remote facilities

A doctor's signoff/certificate on the above conditions is required to return to work after any absence due to serious illness or injury that include a signoff that these requirements have been read.

### **Environmental Conditions**

Work is performed indoors and outdoors in all kinds of weather. Chlorine, Polymers, caustic and acidic chemicals are used in the water treatment process.

### **Duties**

All duties and responsibilities are performed with the mandatory understanding of and participation in the District's safety rules and regulations. The amount of fieldwork is significant, with mechanical equipment that can be dangerous. Must be able to work as a team and independently. These positions operate and maintain the Districts water treatment system. Reliable, stable attendance is required.

**Detailed Duties and Responsibilities**

**Facilities Maintenance and General Work**

General cleaning of facilities grounds and process areas including piping, basins and tanks. Observe safe work methods and procedures of the District.

**Preventative and Corrective Equipment Maintenance**

Perform oil changes, lubrication, change air and oil filters, and calibrate pumps. Perform repairs to system piping and related equipment, maintain chlorine. Provide assistance as needed for operation of maintenance activities. Uses common hand and power tools and drives motorized vehicles and equipment in the performance of work. Keep power tools clean and maintained.

**Operations and Laboratory Work**

Operate, monitor and control systems (clarification, membrane). Repair and maintain all fire hydrants and valves, maintain meter routes, keep track of new homes for billing purposes. Make drawings for valve books showing valve locations on new lines and update the District map. Assist Supervisor in repair and calibration of previously installed meters, inspecting water taps, making drawings, repairing broken meters and remote readers. Perform laboratory tests required by state and federal entities regarding water quality and other miscellaneous laboratory work. Perform Operating and Maintenance functions such as air releases and blow-offs to prevent pressure from building to unsafe levels.

**Serves as Supervisor or Assistant Supervisor of Plants**

Provide technical instruction, guidance and training to operator staff, and conduct safety and technical training exercises. Prioritize and schedule daily work assignments instructing work orders as well as contractors for maintenance and repair activities as needed. Generate reports for regulatory compliance, production and overall system performance.

**Performs all related duties as assigned or needed.**