



Board of Public Utilities City of Cheyenne, Wyoming

WATER TREATMENT PLANT OPERATOR 1

Division: **Water Treatment** Class Code: **5523**
Revised Date: **March 2013** FLSA Status: **Non-Exempt**

GENERAL PURPOSE:

Performs a combination of basic, semi-skilled and skilled work in the operation and maintenance of the Water Treatment (WT) plant equipment and facilities for the Board of Public Utilities (BOPU); treats drinking water, collects and analyzes water samples, and monitors, inspects, maintains and adjusts equipment;

DISTINGUISHING CHARACTERISTICS:

The Water Treatment Plant Operator 1 is the trainee classification. Receives immediate direction and guidance from more senior operators, lead plant operator, and plant supervisor; performs routine duties while learning federal, state, and local standards and specific methods and techniques for the operation and maintenance of the BOPU's water purification, water storage, and transmission facilities; advances to Water Treatment Plant Operator 2 after gaining experience and knowledge, obtaining required certifications and demonstrating job proficiency.

PRIMARY DUTIES AND RESPONSIBILITIES:

*The following duties **ARE NOT** intended to serve as a comprehensive list of all duties performed by all employees in this classification, only a representative summary of the primary duties and responsibilities. Incumbent(s) may not be required to perform all duties listed and may be required to perform additional, position-specific duties.*

- Keeps the mission, vision and values of the Board of Public Utilities at the forefront of decision making and action; builds strategic and collaborative relationships and interacts with others in a way that builds confidence and trust; provides excellent customer service by taking action to accomplish objectives, maintaining high levels of work and productivity, and generating innovative solutions to work situations.
- Operates water purification, water storage and transmission facilities and performs equipment maintenance; performs work in accordance with all quality standards and safety regulations and procedures; duties will vary according to job assignment and skill level.
- Collects and analyzes water samples in order to monitor water quality characteristics; including but not limited to chlorine residual, turbidity, and other basic water quality parameters; monitors chemical dosage rates and other operational parameters.
- Monitors Supervisory Control and Data Acquisition (SCADA) process control system gauges, meters and electronic control panels; monitors and regulates physical and chemical processes.
- Monitors, maintains, cleans and adjusts automated and manual equipment such as pumps, compressors, valves and other electrical and electronic equipment to control and adjust flow and treatment processes according to BOPU policies and procedures.
- Observes operating conditions and reports variations; collects meter readings and operational data; enters data into work logs and database records; reports anomalies and unusual conditions to senior operators and supervisor.
- Reads and interprets technical manuals, operations and maintenance manuals, and blueprints; makes mathematical calculations and performs tests to determine if processes are outside of specifications.
- Maintains work areas, tools, and equipment in a safe and orderly condition and in accordance with all safety regulations and procedures; cleans and maintains buildings, equipment, grounds, and property; notifies supervisor of problems beyond scope of authority.

JOB DESCRIPTION

Water Treatment Plant Operator 1

- Operates general and specialized tools, vehicles, motorized equipment, and heavy equipment according to training and skill level.
- Participates in the Respiratory Protection Program.
- Maintains security of WT plant facilities and other assigned facilities through regular inspections and monitoring of remote cameras and alarm systems.
- Follows and enforces all safety rules and regulations; closely follows verbal and written instructions; mitigates and reports safety hazards, equipment problems, security issues, and emergency situations.

MINIMUM QUALIFICATIONS:

Education and Experience:

High School diploma or GED equivalent, including coursework in algebra and chemistry AND one year of general mechanical and electrical repair and maintenance experience; OR an equivalent combination of education, training and experience.

Required Licenses or Certifications:

- Valid Driver's License with good driving history.
- Must pass Level 1 Water Systems Operator certification test from Wyoming Department of Environmental Quality (WDEQ) within one year of hire.
- CPR/AED Certification.
- Depending on the needs of the BOPU other job specific training and certifications may be required.

Basic Knowledge of:

- Federal, state and local laws and regulations governing WT plant operation, including United States Environmental Protection Agency (US EPA) and WDEQ standards.
- Federal, state and local safety rules and regulations; Occupational Safety and Health Administration (OSHA) requirements, safe work practices and safety precautions in a water treatment plant environment.
- OSHA Material Safety Data Sheets (MSDS) for hazardous and non-hazardous chemicals in the work place.
- BOPU and Division policies and procedures.
- Principles, methods, materials, tools, and equipment used in the operation and maintenance of WT plant facilities.
- Understanding of process control theory and practical application to BOPU treatment processes.
- Methods, practices, standards and specifications required for compliance with water treatment regulations.
- Mathematics used in problem solving related to water treatment applications and processes.
- General and specialized tools and equipment used in operation and maintenance of WT plant facilities.
- Water quality parameters.
- Personal computers and related software.

Basic Skill in:

- Performing maintenance and repair work on mechanical and electrical equipment.
- Maintaining tools and equipment.
- Making routine operating adjustments and repairs to assigned equipment.
- Identifying unsafe conditions and mechanical problems.
- Interpreting and applying technical standards and principles.
- Reading and interpreting gauges, SCADA screens and recording devices.
- Using general and specialized tools and equipment to perform electrical and mechanical repair and servicing tasks.

JOB DESCRIPTION

Water Treatment Plant Operator 1

- Making algebraic calculations.
- Performing laboratory tests.
- Following safe work practices.
- Closely following verbal and written instructions and procedures.
- Establishing and maintaining effective working relationships with co-workers, customers and the general public.
- Effective verbal and written communications.
- Operating a personal computer utilizing a variety of standard and technical software.

Working Conditions:

Work Environment: Works shifts (days/evenings/nights), weekends, and holidays; position is classified as Essential for Emergency Response and therefore is required to work overtime, on-call and call-back duty to respond to emergencies as requested; work is performed indoors at WT plant facilities 90% of the time and 10% of the time outdoors in all weather conditions (mild to extreme); may be exposed to safety hazards and dangerous tools and equipment, including working near high-voltage equipment, contact with a variety of corrosive and toxic chemicals and gasses such as, chlorine, ferric sulfate, fluoride, various polymers, calcium/sodium hypochlorite and caustics.

Physical Demands: Moderate physical work requiring ability to stand 25%, walk 25% and sit 50% of the time; occasional lifting up to 60 pounds (chemical bags) and pushing and pulling up to 250 pounds (pallet jack loaded with chemical bags); lowered work in a standing, stooping/squatting or kneeling position is performed on an occasional basis when maintaining pumps, motors, collecting samples and cleaning; manual dexterity is required to loosen and tighten bolts; climbing stairs is performed frequently to access various plant areas; ladder climbing is performed on occasion to clean launders in the plate settlers, change light bulbs and to inspect and maintain various types of equipment; repetitive trunk rotation in standing position is performed on occasion when running samples, using weed eater and shoveling snow; repetitive arm use is required on a frequent basis to perform cleaning duties, opening and closing valves and equipment operation; specific vision abilities required by this job include close vision, distance vision, depth perception, color vision and ability to adjust focus; frequently required to use hands and fingers to handle objects, operate controls and equipment, and to operate a computer and keyboard; constantly required to hear equipment operation and ordinary conversations and to verbally communicate with other staff.

JOB DESCRIPTION
Water Treatment Plant Operator 1

BOARD OF PUBLIC UTILITIES

CERTIFICATION REQUIREMENT

WATER PLANT OPERATOR

All Water Treatment Plant Operators must obtain Certification through the Wyoming Department of Environmental Quality (WDEQ) as follows:

Level 1 Water Systems Operator Certification

- Must pass Level 1 Water Systems Operator certification test from Wyoming Department of Environmental Quality within one year of being hired as a Water Treatment Plant Operator. Must maintain this certification while employed as a Water Treatment Plant Operator.

Level 2 Water Treatment Plant Operator Certification

- Must pass Level 2 Water Treatment Plant Operator certification test from Wyoming Department of Environmental Quality within two years of being hired as a Water Treatment Plant Operator OR within one year of being hired as a Water Treatment Plant Operator and incumbent holds a Level 1 Water Systems Operator Certification.

Level 3 Water Treatment Plant Operator Certification

- Must pass Level 3 Water Treatment Plant Operator Certification test from Wyoming Department of Environmental Quality within three years and six months of being hired as a Water Treatment Plant Operator OR within one year and six months of being hired as a Water Treatment Plant Operator and incumbent holds a Level 2 Water Treatment Plant Operator Certification.

Level 4 Water Treatment Plant Operator Certification

- Must pass Level 4 Water Treatment Plant Operator Certification test from Wyoming Department of Environmental Quality within five years and six months of being hired as a Water Treatment Plant Operator OR within two years of being hired as a Water Treatment Plant Operator and incumbent holds a Level 3 Water Treatment Plant Operator Certification.

I acknowledge receipt of my Job Description and Certification requirements for my position as a Water Treatment Plant Operator for the Board of Public Utilities, Water Treatment Division. I understand that I am responsible for maintaining all required certifications while employed as a Water Treatment Plant Operator.

Employee

Date

Supervisor

Date