Water Treatment Operator in Training

JOB DESCRIPTION

JOB TITLE: Laborer/Operator in Training
DEPARTMENT: Water Systems
REPORTS TO: Water Systems Operations Manager

PRINCIPAL PURPOSE OF JOB: Performs routine designated tasks in a learning mode at the water treatment plant and facilities to develop proficiency in all operations and maintenance functions so as to be certified as an Operator within 12 months or the minimum required experience period.

LEVEL OF AUTHORITY: Work is performed under close and immediate supervision of a higher classified employee.

WORK ENVIRONMENT: Depending on the task being performed, the environment may be a wet, muddy, dark, cold, confined space up to 45 feet below ground, requiring protective gear and special training in basic confined space procedures; a 55,000 volt substation; various areas of the treatment plant and intake station, subject to hot, noisy, wet, or slippery conditions; or, in emergency situations, on the river or river front. Must handle hazardous materials, such as chlorine and concentrated acids, on a regular basis and be subject to fumes from cutting torch. Much of the work is performed outside in all kinds of weather conditions. Can be unusually stressful due to need to make quick decisions to avoid equipment damage or dangerous results, particularly when learning new equipment and processes.

ESSENTIAL JOB FUNCTIONS

1. Observe and then, under close supervision, monitor assigned plant operations and record data from control room meters, gauges and recording chart readings. Report malfunctions and unusual trends or conditions to supervisor. When sufficient ability acquired, may make minor corrections and report the action taken.

2. Collect raw water, in-process finished water and effluent samples for in-house and outside analysis. Under close supervision, prepare samples for laboratory tests, such as pH, chlorine and turbidity, in accordance with established procedures. Maintain appropriate records.

3. As assigned, clean sludge and grit from intake chambers, basins, weirs, baffles and rotating arms, using tools such as high pressure washers, water hoses and brushes.

4. Under close supervision initially, and then with more independence, perform routine maintenance on equipment, such as lubrication, oil changes and belt changes. Assist in routine repair work such as disassembly, repair and installation of valves, switches, process instrumentation, motors and related equipment.

5. Perform plant and landscape maintenance duties within scope of ability and with appropriate supervision. This includes: inspection, cleaning and maintenance of tanks;
corrosion control of plant piping and valves; structural concrete repairs; scraping and painting; carpentry; plumbing; minor electrical repairs; mopping and waxing floors; cleaning windows and mowing and trimming lawns.

6. Perform all work in accordance with sound safety practices and using appropriate safety devices and equipment.

7. Respond to public inquiries in a courteous manner, provide information within scope of knowledge and refer to supervisors as appropriate.

8. Perform clerical and administrative duties as assigned.

9. May be required in emergency situations to report to work during unscheduled time.

ADDITIONAL JOB FUNCTIONS

1. May perform portions of the work of higher classified positions occasionally, within scope of abilities and as assigned.

2. May perform duties of similar complexity in any utility department as required or assigned.

QUALIFICATIONS

Technical

1. Must be a high school graduate or possess a General Equivalency Diploma (GED) and be able to obtain certification as an Operator in Training.

2. Must be able to obtain certification as a Water Treatment Plant Operator I within 12 months or the minimum required experience period.

3. Must be able to learn to operate all major plant systems within 12 months.

4. Must possess a valid Montana State driver's license.

5. Must have a good basic knowledge of mechanical, electrical, pneumatic and hydraulic theory and application and be able to learn to use manuals and other resources to apply that knowledge in water treatment operations and other diverse requirements of the job.

6. Must receive training in confined space procedures and use and containment of all hazardous chemicals used. Must receive training in the use of all safety equipment, including SCBA's (self-contained breathing apparatus), oxygen-detection meter, blower, respirator, etc.

7. Must be able to learn to use basic spreadsheet and word processing computer programs to enter data and prepare correspondence. Must be able to learn to operate programmable logic controllers (PLC's) to monitor and maintain operations.
Physical Capabilities

1. Physical strength and ability sufficient to perform heavy manual labor for extended periods under wet, cold and generally unpleasant conditions. Heavy labor is defined, for example, as frequently exerting force sufficient to lift bags weighing up to 555 pounds from shoulder-high pallet, turn and twist with weight above the waist and dump contents into waist-high feed bin.

2. On occasion, may perform very heavy manual labor. Very heavy labor is defined, for example, as working on a three-person team to maneuver approximately 600 pounds onto lifting devices while working in a 45-foot deep well, or on a two-person team to carry baskets weighing 200 pounds for numerous repetitions.

3. Ability to climb up and down 40-foot ladder, or higher, in full safety gear that is bulky and weighs approximately 20 pounds, and descend from ladder onto sloped surface handling fire hose.

4. Physical stamina and agility sufficient to stand, walk, climb stairs, crawl and bend in confined spaces and engage in similar physical activities for the duration of the shift, as necessary.

5. Capacity for sustained attention to functioning machinery and equipment. Good sensory perception to monitor plant machinery and operations visually, audibly, by smell, and by touch (for temperature and vibration) on an ongoing basis.

6. Ability to monitor radio messages while doing other work throughout shift.

7. Ability to wear all required safety and protective gear and equipment.

Other Capabilities

1. Ability to learn to read equipment instruction and maintenance manuals, drawings, schematics and blueprints.

2. Good working knowledge of math and chemistry and ability to learn the specific applications of these in the plant and laboratory.

3. Desirable to have comparable experience in a work environment requiring the ability to make rapid and sound decisions in the event of extraordinary situations.

4. Ability to follow oral and written instructions.

5. Ability to learn to perform a variety of clerical functions, including typing correspondence, making legible and orderly entries in logs and work order reports and maintaining files.

6. Ability to attend to detail and keep a sustained surveillance of equipment and plant.
Use of Tools and Equipment

In addition to computer and all specialized plant equipment, operate forklift and pickup truck. To the extent of ability as training progresses, use a variety of hand tools, such as drills, wrenches, shovels, etc., and power tools, such as torches, drill and bench presses, grinders, drills, and a variety of saws, including electric, chain, reciprocating, table and jigsaw. Also must be able to use specialized equipment, such as crack welder and electrical test equipment, may be used under close supervision only after considerable training.

OTHER

1. As an absolute condition of employment, employees are required upon hire to sign a drug-free workplace agreement.

2. The statements contained in this job description reflect general details as necessary to describe the principal functions of this job, the level of knowledge and skill typically required and the scope of responsibility. It should not be considered an all-inclusive listing of work requirements. Individuals may perform other duties as assigned, including work in other functional areas to cover absences or relief, to equalize peak work periods or otherwise balance the work load.

3. Following an offer of employment, and prior to starting work, individuals must be required to have a pre-employment physical examination by a physician designated by the Prairie Mountain Utilities. Satisfactory clearance to perform essential job functions will be required for employment.