

## Water Operations Mechanic

FLSA Status: Covered  
Bargaining Unit: District Council of Trade Unions (DCTU)

### General Summary

Positions in this class lead skilled workers through the installation and repair of potable water mains, services, hydrants, and other potable water infrastructure while ensuring adherence to water quality, safety, and traffic control regulations.

### Water Operations Mechanic, Apprentice - 30000144

#### Distinguishing Characteristics

The apprentice level of this class learns to perform the full range of functions of the Water Operations Mechanic within a Bureau of Labor and Industries (BOLI)-sanctioned apprenticeship program. Upon successful completion of the prescribed training program and acquiring the required licenses and certifications, apprentices will be eligible for appointment as a Water Operations Mechanic.

#### Typical Duties/Examples of Work

1. Assists in and learns to perform the full range of Water Operations Mechanic tasks and duties.
2. Responds to calls to work during emergencies.
3. Operates Class A CDL required equipment.
4. Performs related duties as assigned

#### Required Knowledge, Skills and Abilities

Knowledge of: basic water distribution installation, repair, and maintenance principles, water system regulatory requirements, water quality and disinfection methods and principles, traffic control methods and requirements, transportation restoration methods and requirements, and construction safety principles.

Ability to: communicate effectively; read and follow instructions; maintain and create accurate records

Skill in: water system construction methods and techniques

**Special Requirements**

Ability to obtain and maintain a Water Distribution I certification from the Oregon Health Authority within 9 months of hire; ability to maintain a Class A Commercial Driver’s License; completion of Competent Person Training; Flagging/traffic control certification.

**Classification History:**

Adopted: 2-03-99:

Class created as a result of DCTU Classification and Compensation Study 1998-99. This class is composed of the following classes:  
1283 Water Service Mechanic Appr. Revised 11-18-80

Revised: 11-22-04: to add certification requirement

June 2009 - Change Job Class number from 1725 to 30000144, due to system change.

Modified: 5/17/19

**Water Operations Mechanic - 30000145**

**Distinguishing Characteristics**

Upon completion of the Water Operations Mechanic apprenticeship, and under general supervision, this class leads skilled and unskilled workers and directs resources in the installation, repair and maintenance of the Portland’s potable drinking water system appurtenances including but not limited to: distribution and transmission mains, domestic, fire, and irrigation services, fire hydrants, distribution and transmission valves and pressure regulators while ensuring adherence to water quality, safety, and traffic control regulations.

This classification is distinguished from Operating Engineer series by its focus on water distribution systems

**Typical Duties/Examples of Work**

1. Lead a crew of skilled and unskilled workers in the installation, maintenance, and repair of a potable drinking water system; manage project time, materials, and equipment and accurately record materials, equipment and employee time for payroll and project cost accounting.
2. Install water infrastructure to construction plans and standards including but not limited to: mains, domestic and fire services, fire hydrants, valves, and pressure regulators.

3. Repair leaks and breaks on distribution and transmission water mains; domestic, fire, and irrigation services, fire hydrants, distribution and transmission valves, air valves, meter devices, backflow, and regulators.
4. Ensure safety of co-workers and the public, including traffic control; adhere to safe excavation practices and identify site conditions, including when shoring or other protective measures are required; make corrective measures when required.
5. Plan, coordinate and communicate project scope and execution with customers, contractors, engineers, and government agencies.
6. Operate CDL required vehicles and specialty equipment specific to water including but not limited to: hot tap machines, hyper-chlorinators, locators, valve exercising equipment, valve insertion equipment, temporary water stopping equipment, and directional boring and other trenchless technology.
7. Read quarter-section maps, GIS maps, and conduit profiles to identify pressure boundaries, identify isolation valves, air relief, and flushing options for projects and system problems.
8. Plan and execute uni-directional flushing and spot flushing as needed to promote water quality and corrosion control.
9. Draw compliant water quality samples for project compliance and water quality monitoring purposes.
10. Use multiple electronic devices such as phones, laptops, and tablets to complete necessary documentation, timesheets, and paperwork pertaining to work orders, damage reports, and timesheets.
11. Perform water system utility locates in the public right of way.
12. Communicate effectively with co-workers, customers, and others on a broad range of concerns.
13. Restore right of way to City standards.
14. Provide training, mentoring, and evaluations for employees in apprenticeships.
15. Respond to work during emergencies.
16. Performs related duties as assigned.

**Required Knowledge, Skills and Abilities**

Knowledge of: Federal, State and local laws, regulations, and construction standards related to safety and the operations of a potable drinking water system; OSHA standards; Uniform Traffic Control standards; DEQ regulations related to treated drinking water discharge and erosion control; asbestos and contaminated media handling and disposal procedures, and American Water Works Association Drinking Water standards and best practices.

Ability to: Plan and coordinate personnel, equipment and materials to complete water infrastructure construction, maintenance and repair projects in a timely manner; provide leadership and direction to crew members; identify and mitigate job site hazards; provide effective customer service; repair and maintain valves; disinfect fire hydrants to standard for temporary potable water service use; install shoring and other protective devices as required by law to ensure employee safety while working in excavations; read and interpret tabulated data, prints, maps, plans, technical drawings, survey and grade stakes; provide accurate project as-built drawings and information for accurate mapping and record keeping; maintain a Class A CDL and Water Distribution Level 1 certification.

Skill in: Mechanical methods and applications, project planning and execution, time management, communication, decision making, instructing and overseeing others; disinfection methods and applications; thrust restraint methods and applications; shoring methods and applications; identifying confined spaces.

**Special Requirements**

Water Distribution level 1 certification through the Oregon Health Authority; Class A Commercial Driver’s License; completion of Competent Person training; Flagging/traffic control certification.

Some positions require additional endorsements, certifications, and/or licenses.

**Classification History:**

Adopted: 2-03-99:

Class created as a result of DCTU Classification and Compensation Study 1998-99. This class is composed of the following classes:  
1720 Water Service Mechanic Revised 11-18-80

Revised: 11-22-04: to add certification requirement and modify lead language  
June 2009 - Change Job Class number from 1730 to 30000145, due to system  
change.

Revised: 5/17/19