

333-061-0210

Scope

OAR 333-061-0210 through OAR 333-061-0272 apply to community and non-transient non-community public water systems, water suppliers responsible for these types of water systems, and the operators of water treatment plants and distribution systems at community and non-transient non-community public water systems.

Stat. Auth.: ORS 448.131

Stats. Implemented: ORS 448.450, 448.455, 448.460, 448.465 & 448.994

333-061-0220

Classification of Water Treatment Plants and Water Distribution Systems

Water treatment plants and distribution systems at community and non-transient non-community public water systems are classified based on the size and complexity of the water system facility. Classification of a water system or water system facility determines the level of certification required for operators in direct responsible charge of a water system or water system facility as prescribed by OAR 333-061-0225.

- (1) Small water system classification applies when a water system serves 150 service connections or less and:
 - (a) Uses only groundwater as its source; or
 - (b) Purchases finished water from another public water system.
- (2) Water distribution classification applies when a water system is not classified as small in accordance with section (1) of this rule, and is based on the population served by the water system as follows:

Classification: — Population Served:

Water Distribution 1 — 1 to 1,500

Water Distribution 2 — 1,501 to 15,000

Water Distribution 3 — 15,001 to 50,000

Water Distribution 4 — 50,001 or more

- (3) Water treatment classification applies to water treatment plants when:
 - (a) A water system is not classified as small in accordance with section (1) of this rule; and
 - (b) Treatment is provided for contaminants identified in OAR 333-061-0030(1) through (5) and (7) by that water treatment plant.
 - (c) Water treatment classification is based on a point system that reflects the complexity of water treatment present. Points are assigned as follows:

<u>Item</u>	<u>Points</u>
Treatment System Size: (population served or flow whichever is greater)	
Population served	1/10,000 (max 30)
Average daily flow	1/1 mgd (max 30)
Treatment System Water Source:	
Groundwater:	3
Surface Water or Groundwater Under the Influence of Surface Water	5
Chemical Treatment/Addition Process:	
Fluoridation	5
Disinfection:	
Ultraviolet (UV)	2
UV with Chlorine Residual	5
Ammonia/Chloramination	3
Chlorine	5
Mixed Oxidants	7
Ozonation (on-site generation)	10
Residual Maintenance	0
pH Adjustment:	
Slaked-Quicklime (Calcium Oxide)	5
Hydrated Lime (Calcium Hydroxide)	4
All others (hydrochloric acid, sodium hydroxide, sulfuric acid, sodium carbonate)	1
Coagulation & Flocculation Processes:	
Chemical addition (1 point for each type of chemical coagulant or polymer added, maximum 5 points)	1-5
Rapid Mix Units:	
Mechanical mixers	3
Injection mixers	2
In-line blender mixers	2
Flocculation Units:	
Hydraulic flocculators	2
Mechanical flocculators	3
Clarification and Sedimentation Processes:	
Adsorption Clarifier	10
Horizontal-flow (rectangular basins)	5
Horizontal-flow (round basins)	7
Up-flow solid contact sedimentation	15
Inclined-plate sedimentation	10
Tube sedimentation	10

Dissolved air flotation	10
Filtration Processes:	
Single/mono media filtration	3
Dual or mixed media filtration	5
Membrane Filtration/Microscreens	5
Direct	5
Diatomaceous earth	12
Slow sand filtration	5
Cartridge/bag filters	5
Pressure or greensand filtration	10
Stability or Corrosion Control:	
Slaked-Quicklime (calcium oxide)	10
Hydrated Lime (calcium hydroxide)	8
Caustic soda (sodium hydroxide)	6
Orthophosphate	5
Soda ash (sodium carbonate)	4
Aeration: Packed tower, Diffusers	3
Calcite	2
Others: sodium bicarbonate, silicates	4
Other Treatment Processes:	
Aeration	3
Packed tower aeration	5
Ion exchange/softening	5
Lime-soda ash softening	20
Copper sulfate treatment	5
Powdered activated carbon	5
Potassium permanganate	5
Special Processes (reverse osmosis, activated alumina, other)	15
Sequestering (polyphosphates)	3
Residuals Disposal:	
Discharge to lagoons	5
Discharge to lagoons and then raw water source	8
Discharge to raw water	10
Disposal to sanitary sewer	3
Mechanical dewatering	5
On-site disposal	5
Land application	5
Solids composting	5
Facility Characteristics Instrumentation:	
The use of SCADA or similar instrumentation systems to provide data with no process control	1

The use of SCADA or similar instrumentation systems to provide data with partial process control 3

The use of SCADA or similar instrumentation systems to provide data with complete process control 5

Clear well size less than average day design flow 5

Classification of Water Treatment Plants

<u>Classification</u>	<u>Points:</u>
Water Treatment 1	1 to 30
Water Treatment 2	31 to 55
Water Treatment 3	56 to 75
Water Treatment 4	76 or more

- (4) Filtration endorsement is an additional classification that applies when a water treatment plant is classified as Water Treatment 2 and uses conventional or direct filtration treatment to treat surface water or groundwater under the influence of surface water. Filtration endorsement certification, as prescribed by OAR 333-061-0235, is required for operators designated in direct responsible charge of a water treatment plant receiving the filtration endorsement classification, except for those operators already certified at Water Treatment Level 3 or higher.

Stat. Auth.: ORS 448.131

Stats. Implemented: ORS 448.450, 448.455, 448.460, 448.465 & 448.994