

**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>
<b>Treatment System Size:</b> (population served or flow whichever is greater)	
Population served .....	1/10,000 (max 30)
Average daily flow .....	1/1 mgd (max 30)
<b>Treatment System Water Source:</b>	

Groundwater: .....	3
Surface Water or Groundwater Under the Influence of Surface Water .....	5
<b>Chemical Treatment/Addition Process:</b>	
Fluoridation .....	5
<b>Disinfection:</b>	
Ultraviolet (UV) .....	2
UV with Chlorine Residual .....	5
Ammonia/Chloramination .....	3
Chlorine .....	5
Mixed Oxidants .....	7
Ozonation (on-site generation) .....	10
Residual Maintenance .....	0
<b>pH Adjustment:</b>	
Slaked-Quicklime (Calcium Oxide) .....	5
Hydrated Lime (Calcium Hydroxide) .....	4
All others (hydrochloric acid, sodium hydroxide, sulfuric acid, sodium carbonate) .....	1
<b>Coagulation &amp; Flocculation Processes:</b>	
Chemical addition (1 point for each type of chemical coagulant or polymer added, maximum 5 points) .....	1-5
<b>Rapid Mix Units:</b>	
Mechanical mixers .....	3
Injection mixers .....	2
In-line blender mixers .....	2
<b>Flocculation Units:</b>	
Hydraulic flocculators .....	2
Mechanical flocculators .....	3
<b>Clarification and Sedimentation Processes:</b>	
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
<b>Filtration Processes:</b>	
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
<b>Stability or Corrosion Control:</b>	
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
<b>Other Treatment Processes:</b>	
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
<b>Residuals Disposal:</b>	
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
<b>Facility Characteristics Instrumentation:</b>	
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