

**OREGON ADMINISTRATIVE RULES
OREGON HEALTH AUTHORITY, PUBLIC HEALTH DIVISION
CHAPTER 333 DIVISION 61**

Operator Certification Program

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

333-061-0225

General Requirements Applying to Water Suppliers and Water Systems

- (1) Water suppliers responsible for community and non-transient non-community water systems must at all times employ, contract with, or otherwise utilize an operator to be in direct responsible charge of every distribution system and water treatment plant. An operator designated in direct responsible charge of a distribution system or water treatment plant must be available during those periods of time when decisions relating to treatment processes, water quality, and water quantity that may affect public health are made.
- (a) The operator(s) described in this section must be certified as prescribed by OAR 333-061-0228 or OAR 333-061-0235 through 0265, at a level equal to or greater than the classification of the distribution system or water treatment plant as prescribed by OAR 333-061-0220, for which they are responsible.
- (b) A water supplier subject to this rule must report to the Authority, the name(s) of the operator(s) that has been designated to be in direct responsible charge of the distribution system and water treatment plant as applicable, and must notify the Authority within 30 days of any change of operator.
- (2) A water supplier may employ, contract with, or utilize other operators in addition to those required by section (1) of this rule. For operators certified at less than the Authority-required level(s) for distribution or treatment, the water supplier must establish a written protocol for each of the other operators that:
- (a) Describes the operational decisions the operator is allowed to make;
- (b) Requires the operator to notify the operator in direct responsible charge when they make decisions related to process control, water quality or water quantity that may affect public health;
- (c) Describes the specific conditions under which the operator must consult with the operator in direct responsible charge, and when and how consultation is to be made;

- (d) Takes into account the certification level of the operator; their knowledge, skills, and abilities, and the range of expected operating conditions of the water system; and
- (e) Is signed and dated by the operator in direct responsible charge and the operator to which the protocol applies, and is available for inspection by the Authority.

Stat. Auth.: ORS 448.131

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

333-061-0228

Certification Requirements for Small Water System Operators

- (1) To qualify for certification as the operator of a water system classified as small as prescribed by OAR 333-061-0220(1), individuals must:
 - (a) Have graduated from high school or completed an approved GED program and completed an Authority-approved training for small water system operations and water treatment processes; and
 - (b) Submit a certificate demonstrating the completion of the required training specified in subsection (1)(a) of this rule.
- (2) Certification at the small water system level expires on July 31 three years after the training specified in subsection (1)(a) was completed.
- (3) Individuals certified as prescribed by OAR 333-061-0235 through OAR 333-061-0265 at levels 1 through 4 for water distribution or water treatment are qualified to be designated in direct responsible charge of a water system classified as small as prescribed by OAR 333-061-0220(1).
- (4) Small water system operator certification as prescribed by this rule is exempt from fees.

Stat. Auth.: ORS 448.131, 448.450

Stats. Implemented: ORS 448.450, 448.455, 448.460

333-061-0230

Contracting For Services

- (1) Water suppliers responsible for community and non-transient non-community water systems may establish contracts with an individual certified operator, another water supplier, or an organization with certified operators available for contract to obtain operational services at a public water system.
- (2) Operators contracted to be in direct responsible charge of a water system, distribution system or a water treatment plant, as prescribed by OAR 333-061-0225 must be certified at or greater than the level of the classification of the water system or facility for which they will be responsible.
- (3) Written contracts for operators designated in direct responsible charge of a water system must:
 - (a) Require the operator to be available on call 24 hours every day and able to respond on-site, to the water system, upon request; and

- (b) Specify that the operator will take corrective action when the results of analyses or measurements indicate maximum contaminant levels have been exceeded or minimum treatment levels are not maintained.
- (4) Water suppliers must submit to the Authority, a copy of any contract established for certified operators serving at a water system for which the water supplier is responsible.
 - (a) Contracts must be signed by the operator and the water supplier, or an authorized representative of the water supplier, before the operator may provide any services to the water supplier.
 - (b) Contracts must be submitted to the Authority within 30 days of the contract being signed by all parties.
- (5) Contracts are only valid for individuals that possess current certification.

Stat. Auth.: ORS 448.131

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

333-061-0232

General Requirements Applying to Water System Operators

Operators serving at water systems and water system facilities as specified in OAR 333-061-0210 are responsible for ensuring the safe operation of the water system facilities for which they are responsible, and the production of safe drinking water at that water system. All operators serving at water treatment plants and distribution systems must:

- (1) Comply with any Authority order or investigation;
- (2) Ensure every application, record, or other document filed with or reported to the Authority by the operator is true and accurate; and
- (3) Immediately notify the Authority when a violation of these rules is observed that may result in a public health hazard.

Stat. Auth.: ORS 448.131

Stats. Implemented: ORS 448.450, 448.455 & 448.994

333-061-0235

Operator Certification Requirements, Levels 1-4

Operator certification, as specified in this rule, corresponds to each of the levels of water system facility classification specified in OAR 333-061-0220(2) through (4).

- (1) To receive certification as specified in this rule, applicants must:
 - (a) Provide proof of, including the date of graduation or completion, a high school diploma, GED, associate's degree, bachelor's degree, master's degree, or PhD; and
 - (b) Successfully complete an examination for the level and type of certification sought by the applicant.
- (2) Minimum qualifications for water treatment (WT) or water distribution (WD) operator certification are identified in Table 46. Experience or a combination of experience and education is required depending on the certification and level sought. For the purposes of this rule, "post high school education" means that education acquired through programs such as short schools, correspondence courses, trade schools, colleges,

universities, formalized workshops or seminars that are acceptable to the Authority and for which college or continuing education credit is issued by the training sponsor.

Table 46

Certification Type and Level of Certification	Required Combination of Experience and Post High School Education		Operational Decision-Making Experience Required ³
	Experience ¹	Education ²	
WD or WT level 1	12 months	None	None
	None	12-month certificate or associate's degree in an Authority-approved water and environmental technology program	None
WD or WT level 2	36 months	None	None
	24 months	12 months	None
WD or WT level 3	96 months	None	30 months
	60 months	12 months	30 months
	48 months	24 months	24 months
	36 months	36 months	18 months
WD or WT level 4	120 months	None	36 months
	84 months	12 months	30 months
	72 months	24 months	30 months
	60 months	36 months	30 months
	48 months	48 months	24 months

¹ Months of work experience required, as specified in OAR 333-061-0235(2)(a).

² Months of education required, as a substitution for work experience, as specified by OAR 333-061-0235(2)(b).

³ Months of operational decision-making experience required, as specified in OAR 333-061-0235(4). This experience may also count as general work experience.

- (a) Operating experience must have been gained through direct, “hands-on” operation of water system facilities and includes, but is not limited to, decisions related to water quality or quantity that may affect public health. Knowledge gained from the performance of duties as an official, inspector, manager, engineer, or director of public works, and that does not include the actual operation or supervision of water system facilities, does not qualify an individual for certification as prescribed by these rules.
 - (A) For water distribution certification, experience in one of the following fields may be accepted, not to exceed one-half of the total experience required: wastewater collection; water treatment; cross connection control; and industrial or commercial process water treatment.
 - (B) For water treatment certification, experience in one of the following fields may be accepted, not to exceed one-half of the total experience required: wastewater treatment; wastewater treatment laboratory; water distribution; and industrial or commercial process water treatment.

- (C) One year of experience is equivalent to 12 months of full-time employment with 100 percent of the individual's time dedicated to activities directly related to the certification for which they are applying.
 - (D) Operating experience earned at a water treatment plant or distribution system is considered qualifying experience for certification up to one classification level higher than that of the water system facility where the experience was earned.
- (b) The Authority may, at its discretion, permit the substitution of post high school education for experience. Acceptable fields of study include, but are not limited to: allied sciences, chemistry, engineering, industrial or commercial water processing, wastewater collection, wastewater treatment plant operations, wastewater laboratory analysis, water distribution, and water treatment plant operations.
- (A) Substituted education may not exceed one-half of the experience required for the certification and level sought except for level 1 certification, where an Authority-approved certificate or degree can substitute for all the required operating experience.
 - (B) Any degree or accumulation of college credit hours must be from an educational institution accredited through an agency recognized by the U.S. Department of Education.
 - (C) The following are considered equivalent to 12 months of post high school education:
 - (i) One year of college education;
 - (ii) Thirty semester hours of college education;
 - (iii) Forty-five quarter hours of college education; or
 - (iv) Forty-five CEUs.
 - (D) College credits and post high school education from other sources may be combined to total 45 CEU.
- (3) Individuals may request credit for on-the-job training as either experience or education, but not both.
- (4) Individuals seeking certification at water distribution and water treatment levels 3 and 4 must possess operational decision-making experience as defined in OAR 333-061-0020(87). Any work experience as specified in subsection (2)(a) of this rule qualifies as operational decision-making experience if it meets the criteria specified in OAR 333-061-0020(87).
- (5) To qualify for filtration endorsement certification, as prescribed by OAR 333-061-0220(4), individuals must:
- (a) Possess WT Level 2 certification;
 - (b) Have one year of operational decision-making experience at a water treatment plant utilizing conventional or direct filtration treatment; and
 - (c) Successfully pass a filtration endorsement examination.

Stat. Auth.: ORS 448.131 & 448.450

Stats. Implemented: ORS 448.450 & 448.455

333-061-0245

Applications for Certification, Levels 1-4

- (1) An applicant for certification must submit documentation with any application demonstrating that their qualifying experience and education meets the minimum requirements specified in OAR 333-061-0235.
- (2) To obtain initial certification or certification at a higher level by examination, individuals must:
 - (a) Submit complete, signed copies of their application for the examination, and affidavit of experience;
 - (b) Meet the minimum qualifications for the certification sought as prescribed by OAR 333-061-0235;
 - (c) Pay the applicable examination fee as prescribed by OAR 333-061-0265 for the certification sought and examination applied for; and
 - (d) Successfully pass the examination for the certification sought.
- (3) To obtain certification by reciprocity, individuals must:
 - (a) Possess current, valid certification in another state or province which has a recognized certification program substantially equivalent to the requirements set forth in these rules;
 - (b) Submit a complete, signed reciprocity application and an affidavit of experience;
 - (c) Pay the applicable reciprocity application fee as prescribed by OAR 333-061-0265 for each certificate desired; and
 - (d) Pay the exam fee as prescribed by OAR 333-061-0265, for any examination as prescribed by OAR 333-061-0250, if required by the Authority.
- (4) All applications for exams must be accompanied by the appropriate fee(s) and documentation, and must be submitted to the Authority 60 days prior to the desired examination date.
- (5) Operating experience earned at a water treatment plant or distribution system is considered qualifying experience for examinations up to one classification level higher than that of the water system where the applicant gained their experience.
- (6) The Authority may waive the education or experience requirements for Level 1 certification if the applicant meets the education requirements and possesses at least three months of operating experience, three months of water-related experience or 30 hours of relevant water system training (three CEUs or three college credits). Upon passing an examination, the Authority will recognize the applicant as an operator in training (OIT) for a period not to exceed 36 calendar months, unless a longer period is approved by the Authority in writing.

Stat. Auth.: ORS 448.131

Stats. Implemented: ORS 448.450, 448.455, 448.460

333-061-0250

Examinations for Certification, Levels 1-4

- (1) Examinations will be provided at locations and at times designated by the Authority or its designee.

- (2) Applicants must obtain a minimum score of 70 percent in order to pass the examination.
- (3) Individuals may not take the same examination more than twice in a 12 month period unless they can demonstrate, to the satisfaction of the Authority, that they have completed specific education related to the examination since taking the second examination.
- (4) The Authority or its designee will score all examinations and notify applicants of the results. Examinations will not be returned to the applicant.

Stat. Auth.: ORS 448.131

Stats. Implemented: ORS 448.450, 448.455, 448.460, 448.465 & 448.99

333-061-0260

Certificate Renewal Levels 1-4

- (1) Certification expires December 31 every two years based upon the first letter in the last name of the individual. Certification for individuals with names beginning in the letters A-K expires in even numbered years, and certification for individuals with names beginning in the letters L-Z expires in odd numbered years. Certification renewal fees may be prorated if an individual's current certification expires one year prior to the beginning of the next two-year certification period.
- (2) Operators must earn two CEUs every two years in areas of relevant subject matter as described below.
 - (a) CEU for specialized operator training will be accepted from the following categories at the discretion of the Authority.
 - (A) Technical capacity: water treatment facilities construction and performance, source construction and protection, capacity, storage, pumping and distribution facility construction and protection, water distribution integrity/leakage and water quality issues related to public/user health.
 - (B) Managerial capacity: water system operation, planning, system governance, development and implementation of system policies, professional support, record keeping, drinking water and related regulations to insure protection of public health, communication and involvement with water users.
 - (C) Financial capacity: adequacy of revenues to meet expenses, revenue sources, affordability of user charges, rate setting process, budgeting, production and utilization of a capital improvement plan, periodic financial audits, bond ratings, debt and borrowing.
 - (b) Two college credits in the fields of engineering, chemistry, water/wastewater technology, or allied sciences satisfy continuing education requirements.
 - (c) CEU from other states having standards equal to or greater than these rules may be accepted by the Authority.
 - (d) Maintaining CEU records is the responsibility of the operator.
 - (e) CEU credit will be awarded for the same course or training only once every two-year period.

- (3) An operator who fails to renew their certification as prescribed by section (1) of this rule by the expiration date cannot be in direct responsible charge of a water system.
- (4) The Authority may grant certification renewal without a reinstatement fee until January 31 in the year following the expiration date of the certification. A reinstatement fee as prescribed by OAR 333-061-0265 is required in addition to any renewal fees for all renewal applications received after the grace period ending on January 31 immediately following the expiration date of the certification.
- (5) Any certified operator who fails to renew their certification for one year following the expiration date of the certification must meet the requirements established for initial applicants for certification as specified in OAR 333-061-0245.

Stat. Auth.: ORS 448.131 & 448.450

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

333-061-0265

Fees

- (1) All fees must be paid to the Oregon Health Authority or its designee.
- (2) Application fees are not refundable unless:
 - (a) The Authority has taken no action on a certification application; or
 - (b) The Authority determines the wrong application has been filed.
- (3) Applicants for certification by exam must submit the exam fee and application fee, along with an original signed and complete application. Examination fees may be refunded if:
 - (a) The application is denied, or
 - (b) The applicant notifies the Authority no less than one week in advance of the exam that the applicant is unable to sit for the exam.
- (4) Applications will be accepted for processing only when accompanied by the appropriate fees as indicated in the fee schedule below:
 - (a) Certification Renewal — \$140.
 - (b) Combination Certification-each additional — \$70.
 - (c) Application Fee:
 - (A) Level 1 Distribution or Treatment — \$90.
 - (B) Level 2 Distribution or Treatment — \$125.
 - (C) Level 3 Distribution or Treatment — \$160.
 - (D) Level 4 Distribution or Treatment — \$195.
 - (E) Filtration Endorsement — \$90.
 - (d) Reciprocity Review (each certification) — \$100.
 - (e) Reinstatement — \$50 + Certificate Renewal Fee.
 - (f) Document Replacement Fee — \$25.
 - (g) Initial certification fees may be prorated to the nearest year for the remainder of the two-year certification period. ¶
- (5) Filtration endorsement certification is an extension of an operator's water treatment certification, and no additional annual fee is required to maintain the endorsement.
- (6) A document replacement fee must be paid at the time of request for a replacement document.

333-061-0270

Refusal, Suspension, or Revocation of Certification

- (1) The Authority may deny an individual's initial or renewal application for operator certification, or suspend or revoke an operator's certification if the applicant or operator:
 - (a) Obtained the certificate by fraud, deceit, or misrepresentation;
 - (b) Has been grossly negligent, incompetent or has demonstrated misconduct in the performance of the duties of an operator or supervisor of a distribution system or water treatment plant in Oregon or any other state, province or country;
 - (c) Has violated or failed to comply with any Authority rule or order;
 - (d) Fails to comply with any Authority investigation; or
 - (e) Knowingly makes any false statement or misrepresentation in any application, record, or other document filed with the Authority.
- (2) An individual whose application or certification is proposed to be denied, suspended, or revoked has the right to a hearing pursuant to ORS chapter 183.
- (3) No person whose certificate has been revoked under this rule is eligible to apply for certification for one year from the effective date of the final order of revocation. Any such person who applies for certification must meet all the requirements established for initial applicants.

Stat. Auth.: ORS 448.131

Stats. Implemented: ORS 431.110, 431.150, 448.450, 448.455, 448.460, 448.465 & 448.994

333-061-0272

Suspension of Certification

- (1) The Authority may immediately suspend an operator's certification for violation of any portion of OAR 333-061-0005 to 333-061-0270 if the Authority finds that such violation(s) constitute a serious danger to the public health or safety. The Authority shall set forth specific reasons for such findings.
- (2) An operator has 90 days from the date of notice to the operator to request a hearing. The hearing shall be held as soon as practicable if a request for hearing is received by the Authority.

Stat. Auth.: ORS 448.131

Stats. Implemented: ORS 431.110, 431.150, 448.450, 448.455 & 448.994