

Operator Certification Program

333-061-0205 Purpose

The purpose of operator certification is to protect public health. The Department accomplishes this purpose by reviewing the experience, education and credentials of persons responsible for the production, treatment and distribution of public drinking water and determining their compliance with an established standard of proficiency.

- (1) The objectives of the program are:
 - (a) To promote the safe and proper operation of water supply systems for protection of the public health.
 - (b) To establish criteria to classify water systems and the skill, knowledge and experience required of an operator and certify persons qualified to supervise their water system.
 - (c) To advise and assist applicants for certification, set forth conditions of reciprocity, and provide for examinations of applicants.
 - (d) To award certificates and maintain a register of current certificate holders by classification and level.
 - (e) To establish and maintain communications between the Department and the operators to insure a flow of information necessary to each party in order to carry out their respective responsibilities.
 - (f) To improve the caliber of water system operation and thereby protect public health and the State's water resources and maximize the returns from the public's investment in these systems.

333-061-0210 Scope

These rules apply to community and non-transient non-community public water systems and their operators.

333-061-0215 Definitions

- (1) "Available" means on-site or able to be contacted as needed, to initiate the appropriate action in a timely manner.
- (2) "Certificate" means a certificate of competency issued by the Department stating that the operator meets the requirements for a specific operator classification and level.
- (3) "Continuing Education Unit (CEU)" - A nationally recognized unit of measurement for assigning credits for education or training that provides the participant with advanced or post high school learning. One CEU is awarded for every ten classroom hours of lecture or the equivalent of participation in an organized education experience, conducted under responsible sponsorship, capable direction and qualified instruction as determined by the Department or its designee.

- (4) “Conventional Filtration Treatment Plant” means a water system using conventional or direct filtration to treat surface water or groundwater under the direct influence of surface water.
- (5) “Department” means the Department of Human Services.
- (6) “Direct Responsible Charge” (DRC) means an individual designated by the owner to make decisions regarding the daily operational activities of a public water system, water treatment facility and/or distribution system, that will directly impact the quality and/or quantity of drinking water.
- (7) “Filtration Endorsement” means a special provision added to a Water Treatment Operator's certification that includes experience in and knowledge of the operational decision making of a Conventional Filtration Treatment Plant.
- (8) “Industrial/Commercial Water Treatment” means treatment for the production of high purity and/or process water for industrial or commercial use.
- (9) “On Call” means available to respond immediately by radio or telephone.
- (10) “Operator” means an individual with responsibilities that directly impact the quality of drinking water including individuals making process control or system integrity decisions about water quality or quantity that affect public health. This term does not include officials, managers, engineers, directors of public works, or equivalent whose duties do not include the actual “hands-on” operation or supervision on-site of water system facilities or operators.
- (11) “Operating Experience” means the routine performance of duties, tasks, and responsibilities at a drinking water system or in a related field as allowed under OAR 333-061-0245(6)(b).
- (12) “Operational Decision Making” means having responsibility for making decisions among the alternatives in the performance of the water treatment plant or the water distribution system regarding water quality or quantity which affect public health.
- (13) “Post High School Education” means, that education acquired through programs such as short schools, bona fide correspondence courses, trade schools, colleges, universities, formalized workshops or seminars that are acceptable to the Department and for which college or continuing education credit is issued by the training sponsor.
- (14) “Small Water System” means a community or non-transient non-community water system serving fewer than 150 connections and either uses groundwater as its only source or purchases its water from another public water system without adding any additional treatment.
- (15) “Water System” means potable water treatment plants and water distribution systems:
 - (a) That have 15 or more service connections used by year-round residents or that regularly serve 25 or more year-round residents; or

- (b) That regularly serve at least 25 of the same persons for more than six months per year;
 - (c) That are defined as a community or non-transient non-community water systems in OAR 333-061-0020.
- (16) “Water Treatment” means a process of altering water quality by physical or chemical means and may include domestic, industrial and/or commercial applications.

333-061-0220

Classification of Water Systems

(1) Water systems are classified as small water, water distribution, and water treatment based on size and complexity, as determined by the Department. The classification of these systems and treatment plants is as follows:

- (a) A water system is classified, for certification purposes, as a Small Water System if it is a community or non-transient non-community water system with fewer than 150 connections and either uses only groundwater as its source or purchases its water from a community or non-transient non-community public water system without adding any additional treatment.
- (b) Water distribution classification is based on the population served, as follows:

<u>Classification:</u>	--	<u>Population Served:</u>
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

- (c) Water treatment plant classification shall be based on a point system that reflects the complexity of treatment. Points are assigned for the treatment of contaminants with a health-based standard as follows:

<u>Item</u>	<u>Points</u>
<u>Treatment system size:</u> (population served or flow whichever is greater)	
Population served	1/10,000 (max 30)
Average daily flow	1/1 mgd (max 30)
<u>Treatment system water source:</u>	
Groundwater:	3
Surface Water or Groundwater Under the Influence of Surface Water	5
<u>Chemical Treatment/Addition Process:</u>	
Fluoridation	5
<u>Disinfection:</u>	
Ultraviolet (UV)	2
UV with Chlorine Residual	5

Ammonia/Chloramination	3
Chlorine	5
Mixed Oxidants	7
Ozonation (on-site generation)	10
Residual Maintenance	0
<u>pH adjustment:</u>	
Slaked-Quicklime (Calcium Oxide)	5
Hydrated Lime (Calcium Hydroxide)	4
All others (hydrochloric acid, sodium hydroxide, sulfuric acid, sodium carbonate)	1
<u>Coagulation & Flocculation processes:</u>	
Chemical addition	1-5
(1 point for each type of chemical coagulant or polymer added, maximum 5 points)	
<u>Rapid mix units:</u>	
Mechanical mixers	3
Injection mixers	2
In-line blender mixers	2
<u>Flocculation units:</u>	
Hydraulic flocculators	2
Mechanical flocculators	3
<u>Clarification and Sedimentation Processes:</u>	
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
<u>Filtration Processes:</u>	
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
<u>Stability or Corrosion Control:</u>	
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
<u>Other Treatment Processes:</u>	
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
<u>Residuals Disposal:</u>	
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
<u>Facility characteristics Instrumentation:</u>	
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

Class:	Points:
Water Treatment 1	1 to 30
Water Treatment 2	31 to 55
Water Treatment 3	56 to 75
Water Treatment 4	76 or more

- (d) Systems using a Conventional Filtration Treatment Plant to treat surface water or groundwater under the influence of surface water are classified as Water Filtration and shall have an operator who has a valid Water Treatment 2 or higher certification and a Filtration Endorsement.

333-061-0225

General Requirements Applying to Water Systems

- (1) Water suppliers responsible for Community or Non-Transient Non-Community water systems must at all times employ, contract with or otherwise utilize an operator designated to supervise the water system, to be in direct responsible charge of the water system, and to be available during those periods of time when treatment processes and operational decisions that affect public health are made.
- (2) The operator(s) described in section (1) above, must be certified at a level equal to or greater than the classification of that water system.
- (3) Water systems are classified according to the size and complexity of the water system or water treatment plants to determine the classification type and level required for the operator.
- (4) The owner of a water system subject to these rules must report to the Department the name(s) of the operator(s) which they have designated to be in direct responsible charge of the system and notify the Department within 30 days of any change of operator.
- (5) The water supplier may employ, contract with, or utilize other operators as needed on-site in addition to those required under (1) and (2) above. For operators certified at less than the Department-required level for treatment and/or distribution, the water supplier must establish a written protocol for each of these other operators that:
 - (a) Describes the operational decisions the operator is allowed to make;
 - (b) Describes the conditions under which the operator must consult with the certified operator in direct responsible charge, and when and how contact is made;
 - (c) 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
 - (d) Is signed and dated by the operator in direct responsible charge and the other operator and is available for inspection by the Department.

333-061-0228 Certification Requirements For Small Water System Operators

- (1) An applicant for initial certification as an operator of a small water system must meet one of the following requirements:
 - (a) Documentation of a high school diploma or Department approved equivalent; and completion of Department approved training on small water system operation and water treatment processes, or
 - (b) Passing a Department approved written examination covering basic small water system operation and water treatment.
- (2) A small water system operator certificate expires on July 31 of every third year. A certificate will be renewed upon satisfactory evidence presented to the Department that the operator has completed 6 hours of Department

approved continuing education since the issuance date of the last certificate and submittal of the designated application form. When renewed, the new certificate will be valid for three years from the expiration date of the prior certificate.

- (3) An operator whose certificate has expired cannot be in responsible charge of any small water system.
- (4) Small water system operators are exempt from fees.

333-061-0230 Contracting For Services

- (1) Water systems may contract with a certified operator or a water system having certified operators to provide supervision. The contract operator must be certified at the level equal to or greater than the classification of the water system.
- (2) The written contract must assure that the contracted operator will:
 - (a) Be available on 24-hour call and able to respond on-site upon request;
 - (b) Specify corrective action when the results of analyses or measurements indicate maximum contaminant levels have been exceeded or minimum treatment levels are not maintained and report the results of these analyses as prescribed by OAR 333-061-0040; and
 - (c) Assure that all operational decisions that affect public health are made in accordance with OAR 333-061-0225.
- (3) Proof of the contract must be submitted to the Department by the water system owner within 30 days of hire.

333-061-0235 Operator Requirements Levels 1-4

Certificates are awarded at four (4) levels in each classification of water treatment (WT) and water distribution (WD), as well as a Filtration Endorsement, and are subject to the following requirements:

- (1) Water Treatment or Distribution Level 1 Operator Certification qualifications:
 - (a) Education: High School Diploma or equivalent;
 - (b) Experience: 12 months of qualifying operating experience;
 - (c) An Associate Degree in Water Technology may be substituted for 6 months of experience. No other education or substitution will be credited for this level.
 - (d) Successful completion of a Water Treatment or Distribution Level 1 examination.
- (2) Water Treatment or Distribution Level 2 Operator Certification qualifications:
 - (a) Education: High School Diploma or equivalent plus post high school education and/or qualifying operating experience in one of the following combinations:
 - (A) 3 years of experience; or

- (B) 2 years of experience and 1 year of post high school education; and
 - (b) Successful completion of the Water Treatment or Distribution Level 2 or the Level 2 multiple-entry examination.
- (3) Water Treatment or Distribution Level 3 Operator Certification qualifications:
 - (a) Education: High school Diploma or equivalent plus post high school education and/or qualifying operating experience in one of the following combinations:
 - (A) 1 year post high school education and 5 years experience, of which 2.5 years must have been involved in operational decision making; or
 - (B) 2 years of post high school education and 4 years of experience, of which at least 2 years must have been involved in operational decision making; or
 - (C) 3 years of post high school education and 3 years of experience, of which 1.5 years must have been involved in operational decision making; or
 - (D) For Distribution Level 3 only, 8 years of experience, of which 2.5 years must have been involved in operational decision making; and
 - (b) Successful completion of the Water Treatment or Distribution Level 3 or the Level 3 multiple-entry examination.
- (4) Water Treatment or Distribution Level 4 Operator Certification qualifications:
 - (a) Must be Oregon certified at Level 3; and
 - (b) Must have post high school education and/or qualifying operating experience in one of the following combinations:
 - (A) 4 years post high school education and 4 years of experience, of which 2 years must have been involved in operational decision making; or
 - (B) 3 years post high school education and 5 years experience, of which 2.5 years must have been involved in operational decision making; or
 - (C) 2 years post high school education and 6 years experience, of which 3 years must have been involved in operational decision making; or
 - (D) For Distribution Level 4 only, 10 years of experience, of which 3 years must have been involved in operational decision making; and
 - (c) Successful completion of the Water Treatment or Distribution Level 4 examination.
- (5) Filtration Endorsement qualifications:
 - (a) Must be certified at Water Treatment Level 2 or higher; and

- (b) Must have one year qualifying experience in operational decision making at a Conventional Filtration Treatment Plant; and
- (c) Must successfully pass an examination on conventional filtration treatment.

333-061-0245 Applications For Certification Levels 1-4

- (1) Certification will be granted to applicants on the following basis:
 - (a) The information submitted on the application form as well as any information already on file with the Department;
 - (b) An evaluation of the applicant's qualifications to take the examination by the Department; and
 - (c) Successfully passing an examination approved and administered by the Department.
- (2) Certification by reciprocity is based on current, valid certification in another state or province which has a recognized certification program. Certification may be granted at the level where the examination, experience, and education requirements are equivalent to those outlined in these rules.
 - (a) Individuals requesting reciprocity must submit a complete exam/reciprocity application and pay the reciprocity application fee for each certificate desired.
 - (b) Reciprocity applications are reviewed on a case-by-case basis.
 - (c) The Department may issue a certificate without examination, when, in the judgment of the Department, the certification examination requirements in the other state or province are substantially equivalent to, and the person's education and experience meet the requirements set forth herein.
 - (d) The applicant must pay an exam fee for any examination required.
 - (e) When reciprocity is granted, the person will be subject to the same requirements of renewal as any other persons certified under these rules.
- (3) Each applicant for certification must meet the minimum requirements of experience and education as listed under 333-061-0235 "Operator Requirements Levels 1-4" in order to be eligible for admission to an examination.
- (4) Applicants denied admission to the certification examination or denied certification by reciprocity have the right to appeal such a decision to the Department.
- (5) Transcripts or proof of satisfactory completion of all education and documentation of experience claimed must be submitted with the application.
- (6) Experience and education qualifications are based on the following:
 - (a) One year of experience is equivalent to 12 months full-time with 100% of time spent on activities directly relating to the certificate type for which application is made.

- (b) The Department may credit substitute experience, not to exceed one-half of the qualifying operating experience required, in any of the following areas:
 - (A) When applying for a Water Distribution Certificate:
 - (i) Wastewater Collection experience;
 - (ii) Water Treatment Plant experience; and
 - (iii) Cross Connection Control experience.
 - (iv) Industrial/commercial process water treatment experience.
 - (B) When applying for a Water Treatment Certificate:
 - (i) Wastewater Treatment Plant experience;
 - (ii) Wastewater Treatment Laboratory experience;
 - (iii) Water Distribution System experience; and
 - (iv) Industrial/commercial process water treatment experience.
- (c) Post High School Education must be directly related to the field of water treatment/water distribution and either acceptable as college transfer or valid Continuing Education Units (CEUs).
 - (A) Each year of college education completed, (one year of college education is 30 semester hours or 45 quarter hours, or the equivalent) in the fields of engineering, chemistry, water/wastewater technology, or allied sciences.
 - (B) Forty-Five (45) valid CEUs is equivalent to one year of post high school education.
 - (A) Any combination of 45 college credits and CEUs can be used to total one year of post high school education.
 - (D) 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 to be acceptable.
- (d) Where education credit is earned for on-the-job training, the Department will consider experience or education, but not both, in qualifying experience for an applicant.
- (7) All applications for a new certificate or certificate at a higher grade, and some applications for reciprocity, require an examination and must be accompanied by a fee payment equal to the sum of the appropriate application fee and exam fee as prescribed in OAR 333-061-0265.
- (8) All applications for regular exams scheduled by the Department, must be accompanied by the appropriate exam fee, application fee, and documentation and be postmarked to the Department by the 15th day of March and the 15th day of August prior to the scheduled examination.
- (9) The Department will review the qualifications of each applicant for the purpose of determining whether the applicant has met the minimum

requirements for experience, education, and special training as described in these rules.

333-061-0250 Examinations Levels 1-4

- (1) Examinations will be given at least twice annually at locations and at times designated by the Department.
- (2) The applicant must submit an examination fee and an application fee with all applications submitted to the Department.
- (3) The applicant must include documentation of all claims of education and experience.
- (4) The applicant must obtain a minimum score of 70% in order to pass the examination.
- (5) If an applicant needs to take an examination at a time other than when regularly scheduled by the Department, the applicant will submit an application fee and a special exam fee. The Department will act upon these requests at its earliest opportunity. The regular exam fee will apply to special exams needing disability accommodation under the Federal American's With Disabilities Act.
- (6) An applicant may not take the same examination more than twice in a twelve month period unless they can demonstrate to the satisfaction of the Department specific education completed in the subject area since taking the second examination.
- (7) The Department will deny any application for examination or reciprocity if the certificate requested is of the same type as an expired Oregon certificate that is still under the one-year reinstatement period. Once the expired certificate is reinstated, the application may be processed.
- (8) The Department will not accept incomplete, unsigned, or improperly signed applications or applications not accompanied by appropriate fee(s) and documentation for all claims of education and experience.
- (9) The Department or its designee will score all examinations and notify applicants of the results. Examinations will not be returned to the applicant.
- (10) After passing an examination, the Department will certify operators and issue a wall and a wallet certificate valid for the remainder of the year.

333-061-0260 Certificate Renewal Levels 1-4

- (1) All certificates expire December 31 of each year. Applications for renewals and required documentation must be postmarked to the Department by December 31. An applicant may renew the certificate upon the payment of a renewal fee and satisfactory evidence presented to the Department that the operator has demonstrated the accumulation of two college credits or Continuing Education Units every two years as described below:
 - (a) The Department, or its designee, shall determine the relevance of the subject matter to the public health objectives of certification when

determining the number of CEUs allowed for specialized operator training using the following criteria:

- (A) Technical capacity includes: 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 includes: 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 includes: 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 will meet continuing education requirements.
 - (c) CEUs from other states having standards equal to or greater than these rules may be accepted by the Department.
 - (d) Maintaining CEU records is the responsibility of the operator.
- (2) The Department will send a notice of certificate expiration to each certificate holder at the last address of record. Operators are not relieved of responsibility to reinstate their certificates if they do not receive the notice.
 - (3) An operator who fails to renew the certificate pursuant to the provisions of this section by the expiration date cannot be in direct responsible charge of a water system. The suspension may be lifted by paying the late fee, the renewal fee, and documentation of CEUs (when required), if postmarked by March 31 following the date of expiration.
 - (4) An operator who has failed to renew the certificate by March 31 following the date of expiration must apply for reinstatement of certification by submitting a Renewal Form accompanied by a reinstatement fee plus the annual renewal fee, and provide documentation of CEUs (when needed).
 - (5) If an operator fails to renew for a year following the date of expiration, the requirements established for new applicants must be met by passing an examination and paying examination and reinstatement fees.

333-061-0265 Fees

- (1) All fees are to be made payable to the Department of Human Services.
- (2) Application fees are not refundable unless:
 - (a) The Department has taken no action on a certification application;

- (b) The Department determines the wrong application has been filed.
- (3) Applicants for initial certification by exam must submit the exam fee and application fee, along with a complete application. Examination fees may be refunded if:
 - (a) The application is denied, or
 - (b) The applicant notifies the Department 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 below.

Fee Schedule

(a)	Certification Renewal	\$40
(b)	Combination Certification-each additional	\$20
(c)	Exam Fee-all	\$35
(d)	Special Exam Fee	\$70
(e)	Application Fee:	
	(A) Level 1 Distribution or Treatment	\$50
	(B) Level 2 Distribution or Treatment	\$70
	(C) Level 3 Distribution or Treatment	\$90
	(D) Level 4 Distribution or Treatment	\$110
	(E) Filtration Endorsement	\$50
(f)	Reciprocity Review (each certification)	\$100
(g)	Reinstatement Fee	\$50 + Certificate Renewal
(h)	Late Fee	\$30 + Certificate Renewal
(i)	Document Replacement Fee	\$25

- (5) Operators having more than one certification pertaining to water systems (water treatment and water distribution) may receive a combination certification. The fee is the full certification renewal fee for one certification and a lesser fee for each additional certification.
- (6) The filtration endorsement is an extension of an operator's water treatment certification, and no additional annual fee is required to maintain the endorsement.
- (7) 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 Department may deny an applicant, suspend, or revoke a certification of competency for violation of any of these rules:
 - (a) The applicant obtained the certificate by fraud, deceit, or misrepresentation.
 - (b) The applicant has been grossly negligent, incompetent or has demonstrated misconduct in the performance of the duties of an

- operator or supervisor of a water distribution system or water treatment plant in Oregon or any other state, province or country.
- (c) The applicant/operator has violated or failed to comply with any Department rule or order.
 - (d) The applicant/operator fails to comply with any Department investigation.
 - (e) Any person who knowingly makes any false statement or misrepresentation in any application, record, or other document filed with the Department.
- (2) Any applicant whose application or certificate has been denied, suspended, or revoked has the right to appeal 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 new applicants and pay a reinstatement fee.

333-061-0272 Suspension of Certification

- (1) The Department may immediately suspend an operator's certificate of competency for violation of any portion of OAR 333-061-0205 to 333-061-0270 if the Department finds that such violation(s) constitute a serious danger to the public health or safety. The Department shall set forth specific reasons for such findings. Hearings, if required pursuant to ORS 183.430(2), shall be held as follows:
 - (a) If a hearing is requested and the request is received by the Department within ten days after the operator's receipt of notice of immediate suspension, the Department shall cause a hearing to be held as soon as practicable but not later than within ten days of the date it receives the request for hearing.
 - (b) 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 the request for hearing is received by the Department more than ten days after the operator's receipt of notice of immediate suspension.