

# Chapter 173-230 WAC

## CERTIFICATION OF OPERATORS OF WASTEWATER TREATMENT PLANTS

### WAC

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### DISPOSITION OF SECTIONS FORMERLY CODIFIED IN THIS CHAPTER

173-230-030	Duties of the board. [Statutory Authority: RCW 70.95B.040. WSR 87-22-006 (Order 87-36), § 173-230-030, filed 10/23/87; WSR 78-11-016 (Order DE 78-16), § 173-230-030, filed 10/11/78; Order 73-30, § 173-230-030, filed 11/9/73.] Repealed by WSR 99-24-117 (Order 98-18), filed 12/1/99, effective 1/1/00. Statutory Authority: Chapter 70.95B RCW.
173-230-050	Certification prerequisites. [Statutory Authority: RCW 70.95B.040. WSR 87-22-006 (Order 87-36), § 173-230-050, filed 10/23/87. Statutory Authority: Chapter 70.95B RCW. WSR 82-09-056 (Order DE 82-07), § 173-230-050, filed 4/16/82. Statutory Authority: RCW 70.95B.040. WSR 78-11-016 (Order DE 78-16), § 173-230-050, filed 10/11/78; Order 73-30, § 173-230-050, filed 11/9/73.] Repealed by WSR 99-24-117 (Order 98-18), filed 12/1/99, effective 1/1/00. Statutory Authority: Chapter 70.95B RCW.
173-230-060	Applications. [Order 73-30, § 173-230-060, filed 11/9/73.] Repealed by WSR 82-09-056 (Order DE 82-07), § 173-230-060, filed 4/16/82. Statutory Authority: Chapter 70.95B RCW.

**WAC 173-230-010 What is the purpose of this regulation?** When wastewater treatment plants are properly operated, public health and the state's waters are protected. Operators must meet minimum standards to assure they are competent to operate and maintain wastewater treatment plants. This rule establishes the requirements for obtaining a wastewater certificate and for the level of certificate required for an operator in responsible charge of a treatment plant. An operator in responsible charge of a wastewater treatment plant must be certified at a level that is equal to or greater than the classification of the wastewater treatment plant.

[Statutory Authority: Chapter 70.95B RCW. WSR 99-24-117 (Order 98-18), § 173-230-010, filed 12/1/99, effective 1/1/00. Statutory Authority: RCW 70.95B.040. WSR 87-22-006 (Order 87-36), § 173-230-010, filed 10/23/87. Statutory Authority: Chapter 70.95B RCW. WSR 82-09-056 (Order DE 82-07), § 173-230-010, filed 4/16/82. Statutory Authority: RCW 70.95B.040. WSR 78-11-016 (Order DE 78-16), § 173-230-010, filed 10/11/78; Order 73-30, § 173-230-010, filed 11/9/73.]

**WAC 173-230-020 Definitions.** (1) "Activated sludge process" means a biological wastewater treatment process in which a mixture of wastewater and activated sludge is agitated and aerated. The activated sludge is subsequently separated

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from the treated wastewater by sedimentation and wasted or returned to the process as needed.

(2) "Biofiltration" means the process of passing a liquid through a biological filter that contains fixed media on surfaces which develop zoogeal films that absorb and adsorb fine suspended, colloidal, and dissolved solids and release end products of biochemical action.

(3) "Certificate" means the certificate of competency issued by the director stating that an individual has met the requirements for a specific classification in the wastewater treatment plant operator's certification program.

(4) "Certificate holder" means the individual to whom a certificate is issued.

(5) "CEU" means continuing education unit that is a nationally recognized unit of measurement similar to college credit. One CEU is awarded for every ten contact hours of participation in an organized continuing education experience under responsible sponsorship, capable direction, and qualified instruction.

(6) "College credits" means credits earned toward a college degree or in course work that is relevant to the operation of a wastewater treatment plant. College credit also means CEUs. Forty-five CEUs equals forty-five quarter credits equals thirty semester credits.

(7) "Department" means the Washington state department of ecology.

(8) "Director" means the director of the department of ecology or the director's designee.

(9) "Extended aeration" means a modification of the activated sludge process that uses long aeration periods and long mean cell residence times for aerobic digestion of the biological mass by endogenous respiration and promotes the growth of nitrifying organisms.

(10) "GED" means a General Education Development certificate issued by a recognized education institution. A GED is equivalent to a high school diploma.

(11) "Group" and "class" for the purpose of operator certification and wastewater treatment plant classification are the same.

(12) "Lagoon" means any large holding or detention pond, usually with earthen dikes that is used to contain wastewater while sedimentation and biological stabilization occurs.

(13) "OIT" means operator-in-training. This is the entry level certification classification offered by the department.

(14) "Operating experience" means the routine performance of duties, on-site in a wastewater treatment plant, that affect plant performance or effluent quality.

(15) "Operator" means an individual who performs routine duties, on-site at a wastewater treatment plant, that affect plant performance or effluent quality.

(16) "Operator in charge of each shift" means the individual on-site at a wastewater treatment plant whose primary responsibility is to operate the wastewater treatment plant on a regularly run shift. The operator in charge of each shift is subordinate to the operator in responsible charge.

(17) "Operator in responsible charge" means the individual who is routinely on-site and in direct charge of the overall operation of a wastewater treatment plant.

(18) "Owner" means in the case of:

- A town or city, the city or town acting through its chief executive officer or the lessee if operated under a lease or contract;
- A county, the chairman of the county legislative authority or the chairman's designee;
- A sewer district, board of public utilities, association, municipality or other public body, the president or chairman of the body or the president's or chairman's designee;
- A privately owned wastewater treatment plant, the legal owner.

(19) "Primary wastewater treatment" means unit processes consisting of one or more of the following: Screening, comminution and grinding, flotation, precipitation, sludge pumping, and disinfection. Treatment consists of clarification followed by removal, treatment, and disposal of sludge.

(20) "Reciprocity" means the exchange of a valid out-of-state wastewater treatment plant operator's certificate achieved by passing a written examination for an equivalent level of certification without further examination.

(21) "Tertiary" means advanced physical/chemical or biological treatment of wastewater significantly beyond the conventional secondary stage to remove additional suspended and dissolved substances. These substances may include phosphorus and nitrogen, a high percentage of suspended solids, dissolved inorganic solids, toxic compounds, microorganisms, and complex organic compounds.

(22) "Wastewater certification program coordinator" means an employee of the department who is appointed by the director and who administers the wastewater treatment plant operator certification program.

(23) "Wastewater collection system" means any system of lines, pipes, manholes, pumps, liftstations, or other facilities used to collect and transport wastewater.

(24) "Wastewater treatment plant" means a facility used to treat any liquid or waterborne waste of domestic origin or a combination of domestic, commercial or industrial origin, and that, by its design, requires the presence of an operator for its operation. It does not include any facility used exclusively by a single family residence, septic tanks with subsoil absorption, industrial wastewater treatment plants, or wastewater collection systems.

(25) "Wetlands treatment" means those wetlands intentionally constructed and managed for the primary purpose of wastewater treatment.

[Statutory Authority: Chapter 70.95B RCW. WSR 99-24-117 (Order 98-18), § 173-230-020, filed 12/1/99, effective 1/1/00. Statutory Authority: RCW 70.95B.040. WSR 87-22-006 (Order 87-36), § 173-230-020, filed 10/23/87. Statutory Authority: Chapter 70.95B RCW. WSR 82-09-056 (Order DE 82-07), § 173-230-020, filed 4/16/82. Statutory Authority: RCW 70.95B.040. WSR 78-11-016 (Order DE 78-16), § 173-230-020, filed 10/11/78; Order 73-30, § 173-230-020, filed 11/9/73.]

#### **WAC 173-230-040 To whom does this rule apply?**

This rule applies to anyone who owns or operates a wastewater treatment plant.

The operator in charge of the wastewater treatment plant must be certified at least at a level equal to or higher than the classification of the plant. When the plant is operated on more than one daily shift, the operator in charge of each shift must be certified at a level not lower than one level below the classification of the plant.

All individuals operating wastewater treatment plants who are not required to be certified are encouraged to seek certification.

[Statutory Authority: Chapter 70.95B RCW. WSR 99-24-117 (Order 98-18), § 173-230-040, filed 12/1/99, effective 1/1/00. Statutory Authority: RCW 70.95B.040. WSR 87-22-006 (Order 87-36), § 173-230-040, filed 10/23/87. Statutory Authority: Chapter 70.95B RCW. WSR 82-09-056 (Order DE 82-07), § 173-230-040, filed 4/16/82. Statutory Authority: RCW 70.95B.040. WSR 78-11-016 (Order DE 78-16), § 173-230-040, filed 10/11/78; Order 73-30, § 173-230-040, filed 11/9/73.]

**WAC 173-230-061 Levels of certificates and qualifications.** (1) There are five levels of certification offered by the department to individuals who meet minimum qualifications. Those minimum qualifications include required levels of education and experience.

(2)

<b>Qualification Requirements for Operator Certification</b>				
<b>Certification level</b>	<b>Education required</b>	<b>Experience required</b>	<b>Substitutions allowed for education</b>	<b>Substitutions allowed for experience</b>
Operator-in-Training	High school diploma or GED	3 months	One year of excess operating experience may be used for one year of high school or two years of grade school.	May use 3 college credits or CEUs in course work related to wastewater treatment plant operation for experience.
Group I	High school diploma or GED	1 year	One year of excess operating experience may be used for one year of high school or two years of grade school.	None.

Qualification Requirements for Operator Certification				
Certification level	Education required	Experience required	Substitutions allowed for education	Substitutions allowed for experience
Group II	High school diploma or GED	3 years	One year of excess operating experience may be used for one year of high school or two years of grade school.	May use relevant work experience or credits or CEUs for one year and six months of the operating experience.
Group III	High school diploma or GED and 2 years of college (90 credits or CEUs)	4 years with at least 2 years operating experience at a Class II plant	May use excess operating experience for college at a rate of one year of excess operating experience for half of the college (one year). Three years of excess operating experience may be used for the second year of college.	May use relevant work experience and/or excess credits for 2 years of the operating experience.
Group IV	High school diploma or GED and 4 years of college (180 credits or CEUs)	4 years with at least 2 years at a Class III plant	May use excess operating experience for college at a rate of one year of excess operating experience for one year of college for up to half of the college (two years). Three years of excess operating experience may be substituted for one year of college. This rate may be used for the remaining two years of college.	May use excess operating experience for credits. May use related work experience and/or excess credits for 2 years of the operating experience.

(3) Relevant work experience may be substituted for up to one-half of the operating experience required to qualify for the Group II, III and IV levels. This includes:

- (a) Environmental or operations consultant;
- (b) Environmental or an engineering branch of federal, state, county, or local government;
- (c) Wastewater collection system operator;
- (d) Water distribution system operator and/or manager;
- (e) Wastewater pump station operator; or
- (f) Water treatment plant operator.

Other related work experience may include building and equipment maintenance, boiler operation, machinist, laboratory technician, engineering, welding, or other related fields on a case-by-case basis with a written description of the duties performed on the job by the applicant.

(4) College credits substituted for an operating experience requirement cannot also be applied to the education requirement.

[Statutory Authority: Chapter 70.95B RCW. WSR 99-24-117 (Order 98-18), § 173-230-061, filed 12/1/99, effective 1/1/00. Statutory Authority: RCW 70.95B.040. WSR 87-22-006 (Order 87-36), § 173-230-061, filed 10/23/87. Statutory Authority: Chapter 70.95B RCW. WSR 82-09-056 (Order DE 82-07), § 173-230-061, filed 4/16/82.]

**WAC 173-230-065 How do I apply?** Any person seeking certification must submit a completed application and fees to the department. Application forms are available from the wastewater certification program coordinator.

Applicants must meet minimum education and experience requirements to be eligible for examination or reciprocity. Applicants accepted for examination will be scheduled and notified of the date, place, time, and cost of the examination.

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If the application is denied, the applicant will be notified of the reason for the denial.

[Statutory Authority: Chapter 70.95B RCW. WSR 99-24-117 (Order 98-18), § 173-230-065, filed 12/1/99, effective 1/1/00.]

**WAC 173-230-070 Examination.** (1) The department will use written examinations to determine the competency of operators. If examinations are prepared by an organization other than the department, the applicant shall pay any costs associated with the use of the exam.

(2) Examinations will be held at least three times annually at places and times set by the department.

(3) The wastewater certification program coordinator or designee will score all exams. The applicant will be notified of the score. Examinations will not be returned to the applicant.

(4) Certificates will be issued to applicants who pass a written examination.

(5) An applicant who fails to pass the examination must reapply for further examination. No individual will be allowed to retake the same examination more than twice consecutively.

[Statutory Authority: Chapter 70.95B RCW. WSR 99-24-117 (Order 98-18), § 173-230-070, filed 12/1/99, effective 1/1/00. Statutory Authority: RCW 70.95B.040. WSR 87-22-006 (Order 87-36), § 173-230-070, filed 10/23/87. Statutory Authority: Chapter 70.95B RCW. WSR 82-09-056 (Order DE 82-07), § 173-230-070, filed 4/16/82; Order 73-30, § 173-230-070, filed 11/9/73.]

**WAC 173-230-080 Certificate term and renewal conditions.** An owner may request a temporary certificate for an individual when the designated certified operator unexpectedly vacates the position. This request must be made in writing to the wastewater certification coordinator and must

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include an application and fee. The department may issue a temporary certificate at its discretion. A temporary certificate may not exceed a one-year period, is nonrenewable, and cannot be transferred to another individual.

(1) Except for a temporary certificate, a certificate is valid from January 1 until December 31 of the same year or the year designated by the department.

(2) Except for a temporary certificate, a certificate is renewable only when the certificate holder demonstrates and provides documentation to the department of continued professional growth in the field. The department will mail renewal notices to all certificate holders eligible to renew before the certificate expires.

(3) Each certificate holder must accomplish one of the following activities during a three-year period ending December 31, 1979, and each three-year period after that date.

(a) Accumulate a minimum of three CEUs or college credits in coursework relevant to the field;

(b) Advance by exam to a higher level of certification in Washington's wastewater treatment plant operator's certification program. Advancement from OIT to Group I certification will not fulfill this requirement;

(c) Achieve certification by examination in the waterworks certification program administered by the Washington department of health in the water treatment plant operator, water distribution manager, or the cross connection control specialist classifications;

(d) Achieve certification by examination or advance by examination to a higher level in Washington's voluntary wastewater collection system operator's certification program administered by the Washington Wastewater Collection System Personnel Association.

(4) It is the responsibility of each certificate holder to meet the professional growth requirement and document that growth to the department before December 31 of the last year of the three-year period described in subsection (3) of this section. The department will mail a written notice to each certificate holder who has not fulfilled the continued professional growth requirement. If this requirement is not satisfied, the certificate is not renewable. Failure to renew a certificate for any reason will be handled as described in WAC 173-230-100.

(5) The department may collect renewal fees for a period not to exceed three calendar years. The department will notify certificate holders who are eligible for renewal as described in subsection (2) of this section the amount of fees owed and the date the fees must be paid.

[Statutory Authority: Chapter 70.95B RCW. WSR 99-24-117 (Order 98-18), § 173-230-080, filed 12/1/99, effective 1/1/00. Statutory Authority: RCW 70.95B.040. WSR 87-22-006 (Order 87-36), § 173-230-080, filed 10/23/87. Statutory Authority: Chapter 70.95B RCW. WSR 82-09-056 (Order DE 82-07), § 173-230-080, filed 4/16/82; Order 73-30, § 173-230-080, filed 11/9/73.]

**WAC 173-230-090 Fees.** (1) Applications for certification by examination or reciprocity or a temporary certificate will be accepted for processing only when accompanied by a fee of fifty dollars.

(2) Applications for reexamination will be accepted for processing only when accompanied by an application fee.

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The department may waive a portion of the application fee for reexamination.

(3) Application fees are nonrefundable.

(4) Applications for certificate renewals will be accepted for processing only when accompanied by a renewal fee of thirty dollars for each year of renewal.

(5) All receipts will be paid into the state general fund.

[Statutory Authority: Chapter 70.95B RCW. WSR 99-24-117 (Order 98-18), § 173-230-090, filed 12/1/99, effective 1/1/00. Statutory Authority: RCW 70.95B.090 (1) and (2) and chapter 70.95B RCW. WSR 91-13-058 (Order 90-61), § 173-230-090, filed 6/17/91, effective 7/18/91. Statutory Authority: RCW 70.95B.040. WSR 87-22-006 (Order 87-36), § 173-230-090, filed 10/23/87; WSR 78-11-016 (Order DE 78-16), § 173-230-090, filed 10/11/78; Order 73-30, § 173-230-090, filed 11/9/73.]

**WAC 173-230-100 Suspension and revocation of a certificate.** (1) When a certificate is not renewed, the director will notify the certificate holder that the certificate is suspended for sixty days. If the certificate is not renewed during the suspension period, the director will mail a written notice of revocation to the owner of the wastewater treatment plant employing the individual as last known by the department and to the certificate holder at the address last known by the department. The notice of revocation mailed to the certificate holder will be sent by certified mail. If, during the revocation notice period, the certificate is not renewed, the certificate will be revoked ten days after the notice is mailed.

(2) Certificates may also be revoked when the director finds:

(a) Fraud or deceit in obtaining the certificate.

(b) Gross negligence in the operation of a wastewater treatment plant.

(c) Violation of the requirements of this chapter or the statute it implements or of any lawful rule, regulation or order of the department.

(3) No revocation will be made under subsection (2) of this section unless the operator has been notified that revocation is proposed, been advised of the reason and been given an opportunity to appear before the director and be heard on the matter.

(4) A certificate will be suspended immediately when the director is notified by the department of social and health services that a person is not in compliance with a support order or a residential or visitation order. If the person has continued to meet all other requirements for reinstatement during the suspension, the certificate will be reissued when the director is notified by the department of social and health services that the person is in compliance with the order.

If a certificate is revoked, the individual must meet all conditions of certification including application, fees, and passing a written examination to become certified.

(5) If revocation was made due to subsection (2) of this section, the operator will not be eligible to reapply for a certificate for one year from the date the revocation became final.

[Statutory Authority: Chapter 70.95B RCW. WSR 99-24-117 (Order 98-18), § 173-230-100, filed 12/1/99, effective 1/1/00. Statutory Authority: RCW 70.95B.040. WSR 87-22-006 (Order 87-36), § 173-230-100, filed 10/23/87. Statutory Authority: Chapter 70.95B RCW. WSR 82-09-056 (Order DE 82-07), § 173-230-100, filed 4/16/82. Statutory Authority: RCW 70.95B.040. WSR 78-11-016 (Order DE 78-16), § 173-230-100, filed 10/11/78; Order 73-30, § 173-230-100, filed 11/9/73.]

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**WAC 173-230-110 Reciprocity.** The director may waive examinations for applicants holding valid wastewater treatment plant operators certificates or licenses issued by other states that have equivalent standards as determined by the department or its designee.

(1) Applications for reciprocity will be considered for approval only when the department receives confirmation from the certifying authority of the state or province in which the applicant is certified that the certificate is currently valid and was earned by passing a written examination. A copy of the exam passed by the applicant must also be released for review by the department or its designee.

(2) Certificates will be issued to each reciprocity applicant who meets the minimum education and experience requirements for the certification level requested and who passes a written examination comparable to Washington's exam as determined and approved by the director.

[Statutory Authority: Chapter 70.95B RCW. WSR 99-24-117 (Order 98-18), § 173-230-110, filed 12/1/99, effective 1/1/00. Statutory Authority: RCW 70.95B.040. WSR 87-22-006 (Order 87-36), § 173-230-110, filed 10/23/87. Statutory Authority: Chapter 70.95B RCW. WSR 82-09-056 (Order DE 82-07), § 173-230-110, filed 4/16/82; Order 73-30, § 173-230-110, filed 11/9/73.]

**WAC 173-230-120 Appeals.** Decisions of the director under this chapter may be appealed within thirty days from the date of notice to the pollution control hearings board as required by chapter 43.21B RCW and chapter 371-08 WAC.

[Statutory Authority: Chapter 70.95B RCW. WSR 99-24-117 (Order 98-18), § 173-230-120, filed 12/1/99, effective 1/1/00; Order 73-30, § 173-230-120, filed 11/9/73.]

**WAC 173-230-130 Violations.** Violation of this chapter is a misdemeanor. Each day of operation in violation constitutes a separate offense. Upon conviction, violators are subject to fines not exceeding one hundred dollars for each offense. Injunctions may be obtained for continuing violations.

[Statutory Authority: Chapter 70.95B RCW. WSR 99-24-117 (Order 98-18), § 173-230-130, filed 12/1/99, effective 1/1/00; Order 73-30, § 173-230-130, filed 11/9/73.]

**WAC 173-230-140 Classification of wastewater treatment plants.** The director shall classify all wastewater treatment plants according to the following criteria.

Treatment Plant Classification Criteria		
Treatment type	Design flow MGD	Classification
Primary	≤ 1	I
	> 1 ≤ 10	II
	> 10 ≤ 20	III
	> 20	IV
Lagoon (Non-aerated)	All	I
Lagoon (Aerated)	≤ 1	I
	> 1	II

Treatment Plant Classification Criteria		
Treatment type	Design flow MGD	Classification
Biofiltration	≤ 1	II
	> 1 ≤ 10	III
	> 10	IV
Extended aeration	≤ 5	II
	> 5	III
Activated sludge	≤ 1	II
	> 1 ≤ 10	III
	> 10	IV
Wetlands	≤ 1	I
	> 1 ≤ 5	II
	> 5	III
Tertiary	≤ 5	III
	> 5	IV

Plants may be classified in a group different than indicated in this section if:

(1) They have characteristics that make operation less complex or more difficult than other similar plants of the same flow range; or

(2) The conditions of flow or the use of the receiving waters require an unusually high degree of plant operational control; or

(3) They use an approved method of wastewater treatment that is not included in this section.

Beginning January 2000, the department may issue a one-time provisional certificate to the certified operator in responsible charge of a plant or the certified operator in charge of a shift at the plant only if the plant's rating level increased solely due to the adoption of the treatment type and design flow rating system. The provisional certificate will not apply if the rating of a plant increases due to an upgrade, to a change to treatment processes, or to flow. The provisional certificate will be issued only for the operation of a specific plant and may not be transferred if that certified operator leaves employment with that plant.

The holder of a provisional certificate must continue to meet all certificate renewal requirements.

[Statutory Authority: Chapter 70.95B RCW. WSR 99-24-117 (Order 98-18), § 173-230-140, filed 12/1/99, effective 1/1/00. Statutory Authority: RCW 70.95B.040. WSR 87-22-006 (Order 87-36), § 173-230-140, filed 10/23/87; WSR 78-11-016 (Order DE 78-16), § 173-230-140, filed 10/11/78; Order 73-30, § 173-230-140, filed 11/9/73.]