# STATE OF ALASKA

# DEPARTMENT OF ENVIRONMENTAL CONSERVATION



## 18 AAC 74

## WATER AND WASTEWATER OPERATOR CERTIFICATION AND TRAINING

As Amended Through November 26, 2016

## **IMPORTANT NOTE TO READER**

THE REGULATIONS REPRODUCED HERE HAVE BEEN PROVIDED BY THE DEPARTMENT OF ENVIRONMENTAL CONSERVATION AS A PUBLIC COURTESY. WHILE EVERY EFFORT HAS BEEN MADE TO ASSURE THE ACCURACY OF THE REPRODUCED VERSION, THE DEPARTMENT OF ENVIRONMENTAL CONSERVATION CANNOT GUARANTEE ITS ABSOLUTE ACCURACY. PAPER COPIES OF THE REGULATIONS AS ORIGINALLY FILED BY THE LIEUTENANT GOVERNOR ARE AVAILABLE FROM THE DEPARTMENT OF ENVIRONMENTAL CONSERVATION.

THE REGULATIONS HAVE AN EFFECTIVE DATE OF NOVEMBER 26, 2016, ARE IN REGISTER 220, AND WILL APPEAR IN OFFICIAL PUBLISHED FORM IN THE JANUARY 2017 SUPPLEMENT TO THE ALASKA ADMINISTRATIVE CODE.

## CHAPTER 74. WATER AND WASTEWATER OPERATOR CERTIFICATION AND TRAINING

# Article 1. Requirements for a Class 1 – Class 4 Water System or Wastewater System. Section

- 005. (Expired)
- 006. Applicability
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- 120. Classification of water and wastewater systems
- 125. Transition for systems increasing in classification
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- 140. (Repealed)
- 150. (Deleted)
- 160. (Repealed)
- 170. (Repealed)

**Editor's note:** The subject matter formerly found in 18 AAC 74.060 – 18 AAC 74.080, 18 AAC 74.100 – 18 AAC 74.120, and 18 AAC 74.160 – 18 AAC 74.170, can now be found in 18 AAC 74.800 – 18 AAC 74.870.

**18 AAC 74.005. Transition period for September 1993 examination cycle.** Expired. (In effect 5/29/93 - 9/25/93, by em adop., Register 126)

**18 AAC 74.006. Applicability.** The requirements of 18 AAC 74.006 – 18 AAC 74.125 apply to a

(1) public or private wastewater system that

- (A) has 100 or more service connections; or
- (B) is used or intended for use by 500 or more individuals per day;

(2) community or non-transient non-community water system that has 100 or more service connections;

- (3) community or non-transient non-community water system that
  - (A) has 15 or more service connections; and
  - (B) is used or intended for use by 500 or more individuals per day;
- (4) community or non-transient non-community water system that
  - (A) has fewer than 100 service connections;
  - (B) is used or intended for use by fewer than 500 individuals per day; and
  - (C) uses a water treatment process that uses
    - (i) coagulation;
    - (ii) chemically aided filtration;
    - (iii) membrane filtration;
- (iv) ultraviolet light to meet a surface water treatment inactivation requirement;

 $(v) \;\;$  the addition of more than one chemical to accomplish multiple water treatment objectives; or

(vi) a combination of water treatment processes not listed in (i) – (v) of this subparagraph that, in the department's determination, requires a high level of operator skill; in determining whether a combination of water treatment processes requires a high level of operator skill, the department will consider the advice of the board;

(5) community or non-transient non-community water system that

(A) has fewer than 15 service connections;

- (B) is used or intended for use by 500 or more individuals per day; and
- (C) uses a water treatment process that uses
  - (i) coagulation;
  - (ii) chemically aided filtration;
  - (iii) membrane filtration;

(iv) ultraviolet light to meet a surface water treatment inactivation requirement;

(v) the addition of more than one chemical to accomplish multiple water treatment objectives; or

(vi) a combination of water treatment processes not listed in (i) – (v) of this subparagraph that, in the department's determination, requires a high level of operator skill; in determining whether a combination of water treatment processes requires a high level of operator skill, the department will consider the advice of the board;

(6) transient non-community water system that

(A) uses a surface water source or a groundwater under the direct influence of surface water source; and

(B) uses a water treatment process that uses

(i) coagulation;

(ii) chemically aided filtration;

(iii) membrane filtration;

(iv) ultraviolet light to meet a surface water treatment inactivation requirement;

(v) the addition of more than one chemical to accomplish multiple water treatment objectives; or

(v) a combination of water treatment processes not listed in (i) – (v) of this subparagraph that, in the department's determination, requires a high level of operator skill; in determining whether a combination of water treatment processes requires a high level of operator skill, the department will consider the advice of the board; and

(7) transient non-community water system that

(A) uses a groundwater source;

(B) is used or intended for use by 500 or more individuals per day; and

(C) uses a water treatment process that uses

(i) coagulation;

(ii) chemically aided filtration;

(iii) membrane filtration;

(iv) the addition of more than one chemical to accomplish multiple water treatment objectives; or

(v) a combination of water treatment processes not listed in (i) – (v) of this subparagraph that, in the department's determination, requires a high level of operator skill; in determining whether a combination of water treatment process requires a high level of operator skill, the department will consider the advice of the board. (Eff. 1/18/2001, Register 157; am 12/3/2006, Register 180; am 11/21/2010, Register 196; am 11/26/2016, Register 220)

Authority: AS 46.30.040 AS 46.30.080 AS 46.30.120

**18 AAC 74.010. Certified operator requirements.** (a) At all times, a public water system, public wastewater system, and a private wastewater system must have an operator, certified at a level equal to or greater than the classification of the system and

(1) on-site at the system; or

(2) able to be on-site at the system within one hour; if off-site under this paragraph, the operator shall be available by radio or telephone.

(b) The owner of a water system or wastewater system may establish shifts to best meet the needs of the system and to ensure public health protection, in accordance with the following:

(1) a primary shift

(A) is the longest shift during a 24-hour period;

(B) is the shift in which operational decisions are made and may be implemented;

(C) must be not less than six hours in duration, if more than one shift exists within a 24-hour period; and

(D) shall be supervised by an on-site operator certified at a level equal to or greater than the classification of the system;

(2) a secondary shift

(A) is a shift in which operational decisions made during the primary shift may be implemented;

(B) shall be supervised by an on-site operator certified at a level no less than one level below the level equal to the classification of the system; and

(C) may not occur more than two times in a seven-day period without a corresponding primary shift on that same day;

(3) a reduced operation shift

(A) is a shift of short duration;

(B) is a shift in which an operator may conduct system checks to ensure the system is operating within established parameters, but no operational changes are made unless directed by an operator certified at a level equal to or greater than the classification of the system; and

(C) shall be conducted by an on-site operator

(i) certified at not less than a provisional level in the same system type as the system under that operator's control; and

(ii) who possesses adequate training to conduct the duties assigned.

(c) An individual may provide first-response services for a public water system, public wastewater system, or a private wastewater system if the individual, at a minimum,

(1) is adequately trained to identify issues and contact the supervising operator for further direction, and

(2) holds a provisional or higher level certificate if providing response to a class 1 -class 4 water treatment, water distribution, wastewater collection, or wastewater treatment system.

(d) Department approval is required for a method of system supervision other than that described in (b) and (c) of this section. The department will approve, with terms and conditions, or will deny a request under this subsection after considering recommendations of the board. The department may provide interim approval of a request made under this subsection until the next regularly scheduled meeting of the board. (Eff. 8/21/78, Register 67; am 8/24/85, Register 95; am 5/29/93, Register 126; am 1/18/2001, Register 157; am 12/3/2006, Register 180; am 11/26/2016, Register 220)

 Authority:
 AS 46.30.040
 AS 46.30.080
 AS 46.30.120

**18 AAC 74.020. Certification requirements.** (a) An applicant seeking certification under 18 AAC 74.005 - 18 AAC 74.120 must submit a completed application to the department, for the level of certification sought

(1) on a form provided by the department; and

(2) accompanied by the fee required by 18 AAC 74.870.

(b) Except as provided in (d) - (g) of this section, the department will certify an applicant who meets the

(1) examination requirements of 18 AAC 74.040;

(2) experience and education requirements of 18 AAC 74.050; and

(3) fee requirements of 18 AAC 74.870.

(c) An applicant must disclose past or pending disciplinary action by another certifying agency.

(d) When considering an applicant's application for certification, the department may consider past or pending disciplinary action that another certifying agency imposed on the applicant in the applicant's capacity as an operator.

(e) The department may deny certification to an applicant whose certification has been revoked by another certifying agency.

(f) The department may deny certification to an applicant determined to have falsified or withheld information on the applicant's application.

(g) When acting under (d) – (f) of this section, the department will consider the factors set out in 18 AAC 74.830(b). (Eff. 8/21/78, Register 67; am 8/24/85, Register 95; am 1/18/2001, Register 157; am 11/21/2010, Register 196; am 11/26/2016, Register 220)

Authority: AS 46.30.060 AS 46.30.080

## 18 AAC 74.030. Certification without examination. Deleted 8/24/85.

**Editor's notes**. -- Under AS 44.62.060(b) and 44.62.125(b), 18 AAC 74.030 was deleted by the regulations attorney 8/24/85 because it lacked statutory authority.

**18 AAC 74.040. Examination requirements.** (a) To be certified to operate a water or wastewater system classified as class 1 – class 4 under 18 AAC 74.120, or a wastewater treatment system classified as a wastewater stabilization pond system under 18 AAC 74.120(b)(1), an applicant must pass an approved and validated written examination

that demonstrates the applicant's skills, knowledge, ability, and judgment to operate a system of that classification.

(b) To be eligible to take a level 2 - level 4 examination, the examinee must hold a valid passing score in the same system type at one level lower. A passing examination score is valid for three years from January 1 of the year the examination was taken, or for as long as the examinee holds active certification in the same system type. Examinations will be held at least annually, at the time and place announced by the department. The examinee shall pay the examination fee required by 18 AAC 74.870(b) when submitting a request for examination.

(c) Repealed 12/3/2006.

(d) The department will grade each examination administered under this section and notify each examinee of the results within 60 days after the examination. The department will not provide the completed, graded examination to the examinee. The examinee may review the examinee's examination results with the department.

(e) Repealed 11/26/2016. (Eff. 8/21/78, Register 67; am 8/24/85, Register 95; am 1/23/86, Register 97; am 5/29/93, Register 126; am 1/18/2001, Register 157; am 12/3/2006, Register 180; am 11/21/2010, Register 196; am 11/26/2016, Register 220)

Authority: AS 46.30.050 AS 46.30.080

**18 AAC 74.050. Experience and education requirements.** (a) The department will use the basic criteria

(1) set out in (i) – (k) of this section to evaluate an individual's qualifications to operate a wastewater treatment system classified as a wastewater stabilization pond system under 18 AAC 74.120(b)(1);

(2) set out in Table A of this section, except as provided in (g) of this section, to evaluate an individual's qualifications to operate a water or wastewater system classified under 18 AAC 74.120, other than a wastewater stabilization pond system.

# TABLE A GENERAL OPERATOR EDUCATION AND EXPERIENCE REQUIREMENTS\* (in years)

	<b>Operator Level</b>										
	Provi	isional		1		2	3			4	
System Type	Ed.	Op. Exp.	Ed.	Op. Exp.	Ed.	Op. Exp.	Ed.	Op. Exp.	Ed.	Op. Exp.	
Wastewater Collection	12	**	12	1	12	3	13	4	13	6	
Wastewater Treatment	12	**	12	1	12	3	14	4	16	4	
Water Distribution	12	**	12	1	12	3	13	4	13	6	
Water Treatment	12	**	12	1	12	3	14	4	16	4	

**Notes:** Required periods of education and experience are reflected in years. Twelve years of education represents a high school diploma or general educational development (GED) diploma. The department will waive the minimum education requirement for the provisional level and level 1 in accordance with (e)(6) of this section.

\*Additional experience and education criteria and substitution requirements are set out in (b) - (g) of this section.

\*\*Three months of operating experience or the completion of a department-approved training course, as described in (c)(1) of this section is required.

## Abbreviations:

Ed. - Education Op. Exp. - Operator Experience

(b) Additional experience criteria referred to in Table A of this section and used by the department to evaluate qualifications of individuals are subject to the following provisions:

(1) the applicant is responsible for providing verification of current and past experience; the department may contact the applicant's current and previous employers;

(2) at least 50 percent of the operating experience must be obtained in the same system type at not more than one class lower than the level of certification requested, and the department will not allow substitution of education or substitution of operating experience gained in another system type to meet the requirement of this paragraph;

(3) the department will consider a total of 1,950 or more hours worked during a period of 12 consecutive months as one year of experience; the department will prorate less than 1,950 hours worked during a period of 12 consecutive months to a portion of one year of experience.

(c) Except as provided in (b)(2) of this section, the department will allow substitutions for experience required in Table A of this section only as follows:

(1) for provisional level certification, a department-approved college, correspondence, or short course completed within the three years before application may be substituted for experience and must be in the subject area of certification requested;

(2) water treatment and wastewater treatment experience are interchangeable;

- (3) water distribution and wastewater collection experience are interchangeable;
- (4) the following are interchangeable at 25 percent:
  - (A) water distribution and water treatment experience;
  - (B) wastewater collection and wastewater treatment experience;

(C) approved water laboratory and water treatment experience up to a maximum of one year of substituted time;

(D) approved wastewater laboratory and wastewater treatment experience up to a maximum of one year of substituted time.

(5) postsecondary education as described in (d) of this section may be substituted for up to 50 percent of the required operating experience for levels 2, 3, and 4; the rate of exchange of education for experience is one year of experience for each year of departmentapproved, full-time postsecondary education successfully completed that meets the requirements of this section;

(6) education substituted for an operating experience requirement may not also be applied to the education requirement for certification.

(d) Additional education criteria referred to in Table A of this section and used by the department to evaluate qualifications of individuals are subject to the following provisions:

(1) the applicant must provide a transcript, a certificate of completion, or similar verification approved by the department to document education used for certification requirements;

(2) 45 continuing education units (CEUs) in specialized operator training or education approved by the department will be counted as one year of postsecondary education toward the certification requirements; 10 hours of coursework approved by the department equals one CEU; the department will approve specialized training or education coursework if it is related to, or can be applied to, the operation, maintenance, or management of a water supply or wastewater system; the department will consider the advice and recommendations of the board in approving this specialized training or coursework;

(3) the department will credit no more than 45 CEUs for one year of trade school; any time during trade school spent in on-the-job training will count toward the experience requirement separate from the education requirement;

(4) the department will apply a bachelor's degree in physical science, biology, chemistry, physics, engineering, or another related field as four years of postsecondary education toward certification requirements; the department will apply an associate degree in one of those fields as two years of postsecondary education toward certification requirements; if approved by the department, the department will apply college or technical coursework in a non-related field toward certification requirements as calculated under (2) of this subsection.

(e) The department will allow substitutions for the minimum education requirements of Table A of this section only as follows:

(1) two years of accrued excess water treatment or wastewater treatment experience at a class 2 or higher water treatment or wastewater treatment facility may be used to satisfy a maximum of one year of the postsecondary education requirement for level 3 water treatment or wastewater treatment certification;

(2) four years of accrued excess water treatment or wastewater treatment experience at a class 3 or higher water treatment or wastewater treatment facility may be used to satisfy a maximum of two years of the postsecondary education requirement for level 4 water treatment or wastewater treatment certification;

(3) one year of accrued excess water distribution or wastewater collection experience at a class 2 water distribution or wastewater collection system may be used to satisfy a maximum of six months of the postsecondary education requirement for level 3 water distribution or wastewater collection certification;

(4) one year of operating experience may be substituted for either two years of elementary school, or one year of high school education;

(5) experience substituted for an education requirement may not also be applied to the operating experience requirements;

(6) for certification of an individual at the provisional level and level I certification, the department will waive the minimum education requirements for an applicant who passes a written examination and a practical evaluation.

(f) Provisional level certificates will be upgraded to level 1 certificates upon satisfactory fulfillment of the certification requirements of level 1 certification and approval of a completed application. Applications for upgrade of provisional level certificates will be reviewed at least annually.

(g) For an operator who is simultaneously supervising and operating a system that is required to have a certified operator under this chapter, the department may waive the experience requirements of Table A of this section. In reviewing a request under this subsection, the department will consider

(1) the complexity of the system;

(2) the number of hours spent each month simultaneously supervising and operating the system;

(3) whether the simultaneous supervising and operating experience claimed was acquired at the system that the operator will be operating when examined;

(4) whether the operator has a minimum of

(A) 12 months of simultaneous supervising and operating experience toward level 1 certification, even if the total number of hours worked during that period of 12 months is less than 1,950 hours;

(B) 36 months of simultaneous supervising and operating experience toward level 2 certification, even if the total number of hours worked during that period of 36 months is less than 5,850 hours;

(C) 48 months of simultaneous supervising and operating experience toward level 3 certification, even if the total number of hours worked during that period of 48 months is less than 7,800 hours;

(D) 48 months of simultaneous supervising and operating experience toward level 4 water treatment and wastewater treatment certification, even if the total number of hours worked during that period of 48 months is less than 7,800 hours;

(E) 72 months of simultaneous supervising and operating experience toward level 4 water distribution and wastewater collection certification, even if the total number of hours worked during that period of 72 months is less than 11,700 hours;

(5) whether all other applicable requirements of this chapter have been met; and

(6) other factors relevant to assessing the operator's experience.

(h) A certificate that is issued based on a waiver granted in (g) of this section applies only to the system the operator is operating at the time of application. When an operator certified under (g) of this section submits an application and meets the experience requirements of (a) – (e) of this section, the department may upgrade the certificate to one that is transferable.

(i) To be eligible to receive certification to operate a wastewater treatment system classified as a wastewater stabilization pond system under 18 AAC 74.120(b)(1), an applicant must have at least

(1) a high school or general equivalency diploma, or have completed at least 12 years of education; and

(2) three months of operating experience at a system classified as a wastewater pond stabilization pond system; the applicant must attest in the application to satisfy the experience requirement, and must provide verification of required experience if requested by the department.

(j) The minimum education requirement in (i)(1) of this section is subject to the following:

(1) the applicant must attest in the application to completion of the required education and must provide verification if requested by the department;

(2) if an applicant does not have a high school diploma, general equivalency diploma, or 12 years of education, the applicant may achieve the equivalent of 12 years of education through the following substitutions:

(A) one calendar year of experience operating a system classified as a wastewater stabilization pond system may be substituted for either two years of education in grades one through eight or one year of education in grades nine through 12;

(B) 45 continuing education units (CEUs) of approved training may be substituted for one year of high school education; 10 hours of coursework equals one CEU; the department will approve training if that training is directly related to, or can be applied to, the operation, maintenance, or management of a water or wastewater system;

(C) the department will waive the minimum education requirement of (i)(1) of this section for an applicant who passes a written examination and an oral or practical examination;

(3) experience substituted under (2) of this subsection for an education requirement may not also be applied to satisfy the minimum experience requirement of (i)(2) of this section.

(k) If an applicant does not have the minimum experience required under (i)(2) of this section, the completion of an approved training course may be substituted. The department will approve training that is directly related to, or can be applied to, the operation, maintenance, or management of a wastewater stabilization pond system. (Eff. 8/21/78, Register 67; am 8/24/85, Register 95; am 5/29/93, Register 126; am 1/18/2001, Register 157; am 12/3/2006, Register 180; am 11/21/2010, Register 196; am 11/26/2016, Register 220)

**Authority:** AS 46.30.080

**18 AAC 74.060. Display of certificate.** Repealed. (Eff. 8/21/78, Register 67; am 8/24/85, Register 95; am 5/29/93, Register 126; repealed 1/18/2001, Register 157)

**Editor's note:** The subject matter formerly found in 18 AAC 74.060 can now be found in 18 AAC 74.080.

**18 AAC 74.070. Certificate term and renewal.** Repealed. (Eff. 8/21/78, Register 67; am 3/24/85, Register 95; am 1/23/86, Register 97; am 5/29/93, Register 126; repealed 1/18/2001, Register 157)

**Editor's note:** The subject matter formerly found in 18 AAC 74.070 can now be found in 18 AAC 74.810.

**18 AAC 74.080. Lapsed certificate.** Repealed. (Eff. 8/21/78, Register 67; am 8/24/85, Register 95; am 1/23/86, Register 97; am 5/29/93, Register 126; repealed 1/18/2001, Register 157)

**Editor's note:** The subject matter formerly found in 18 AAC 74.080 can now be found in 18 AAC 74.820.

18 AAC 74.090. Canceled certificate. Repealed 2/21/81.

**18 AAC 74.100. Revocation of certificate.** Repealed. (Eff. 8/21/78, Register 67; am 8/24/85, Register 95; repealed 1/18/2001, Register 157)

**Editor's note:** The subject matter formerly found in 18 AAC 74.100 can now be found in 18 AAC 74.830.

18 AAC 74.110. Temporary certification. Repealed. (Eff. 8/21/78, Register 67; am

8/24/85, Register 95; am 1/23/86, Register 97; repealed 1/18/2001, Register 157)

**Editor's note:** The subject matter formerly found in 18 AAC 74.110 can now be found in 18 AAC 74.840.

**18 AAC 74.120. Classification of water and wastewater systems.** (a) Water distribution and wastewater collection systems designated in 18 AAC 74.006 are classified as follows:

(1) except as provided in (2) and (3) of this subsection, water distribution and wastewater collection systems are classified as follows:

(A) systems with 15 to 500 service connections are classified as class 1;

(B) systems with 501 to 5,000 service connections are classified as

class 2;

(C) systems with 5,001 to 15,000 service connections are classified as

class 3;

(D) systems with more than 15,000 service connections are classified as class 4;

(2) for water distributions systems, the following requirements also apply:

(A) water distribution systems where water is circulated or heated to prevent freezing in the water distribution system will be classified at one class higher than the class determined under (1)(A) - (C) of this subsection;

(B) water distribution systems with five or more pressure zones will be classified at one class higher than the class determined under (1)(A) - (C) of this subsection;

(C) water distribution systems with five or more pressure zones and where water is circulated or heated to prevent freezing in the water distribution system will be classified at one class higher than the class determined under (1)(A) - (C) of this subsection;

(3) for wastewater collection systems, the following requirements also apply:

(A) wastewater collection systems where gravity is the only means of wastewater flow will be classified as class 1 systems, regardless of the number of service connections;

(B) wastewater collection systems with 15 or more main line lift

stations will be classified at one class higher than the class determined under (1)(A) - (C) of this subsection.

(b) Water treatment and wastewater treatment systems designated in 18 AAC 74.006 are classified as follows:

(1) wastewater treatment systems that score 1-30 points under (d) of this section, and where stabilization ponds without aeration are the only means of secondary treatment, are classified as wastewater stabilization pond systems;

(2) water treatment and wastewater treatment systems, other than wastewater stabilization pond systems, are classified as set out in Table B of this subsection.

TABLE B         CLASSIFICATION RATING SYSTEM:         TREATMENT SYSTEMS         (By Range of Points)					
System Type	1	2	3	4	
Wastewater Treatment System	1-30	31-55	56-75	76 and above	
Water Treatment System	1-30	31-55	56-75	76 and above	

(c) The department may, after considering the advice of the board, modify the rating system in (a) and (b) of this section as applied to a particular system if the department finds that

(1) unusual factors affect the complexity of unit processes, the quality of raw water sources, or the users of water downstream from wastewater system discharges; or

(2) potential health hazards exist.

(d) To classify wastewater treatment systems under (b) of this section,

(1) the department will use the following point system:

## Item

## Points

## Size

Peak day design capacity, gallons per day:	
less than 10,000	1
10,000 – 50,000	2
50,001 – 100,000	4
100,001 – 500,000	9
500,001 – 1,000,000	12
1,000,001 – 5,000,000	16
5,000,001 – 10,000,000	20
10,000,001 - 50,000,000	25
greater than 50,000,000	

## Pretreatment

Influent pumping	2
Flow equalization basin	1
Manually cleaned screens	1
Mechanically cleaned screens	2
Fine screens, including microscreens	3
Comminutor, barminutor, grinders	2
Grit removal	2

## **Primary Treatment**

Primary clarifiers
Primary clarifiers with chemical addition
Imhoff tank, or other method of combined sedimentation
and digestion, other than a septic tank
Dissolved air flotation

## **Secondary Treatment**

Trickling filter without recirculation
Trickling filter with recirculation
Activated sludge:
Oxidation ditch8
Diffused or dispersed aeration10
Pure oxygen15
Sequencing batch reactor (SBR), intermittent
cycle extended aeration system (ICEAS),
or other batch treatment method
Additional points if an activated sludge plant
is operated in high rate mode or contact
stabilization mode2
Rotating biological contactor10

Activated bio-filter with aeration	10
Activated bio-filter without aeration	8
Stabilization ponds without aeration	5
Aerated lagoon	8
Secondary clarifiers	4
Secondary clarifiers with chemical addition	7

## **Advanced Waste Treatment**

Polishing pond or effluent flow equalization	2
Chemical and physical treatment without secondary treatment	20
Chemical and physical treatment following secondary treatment	15
Ion exchange	4
Granular media filtration	8
Membrane filtration, including reverse osmosis, microfiltration, ultrafiltration	on or
nanofiltration	8
Membrane filtration, integrated system	12
Electrodialysis, electrodialysis reversal	10
Biological or combined chemical and biological nutrient removal	12
Nitrification by extended aeration only	2
Chemical precipitation of phosphorous	3
pH adjustment	3
Activated carbon columns or beds	8

## In-plant Odor Control (maximum of 6 points in any combination)

Biofilter	3
Adsorption with activated carbon or equal adsorbent	3
Wet scrubber	3
Thermal deactivation with catalytic process	6
Odor-reducing sprays	2

## **Sludge Thickening and Dewatering**

Sludge decant tank	2
Gravity thickener basin	3
Gravity belt thickener	4
Screw press	5
Centrifuge	6
Belt filter press, plate-and-frame press, or vacuum filter	8
Sludge bagger	3
Evaporative sludge drying by means of drying beds	2
Additional points if a polymer is added to	
sludge before the sludge is put in drying beds	3

## **Sludge Stabilization and Conditioning**

Unheated anaerobic digestion	8
Heated anaerobic digestion	10
Aerobic digestion	5
Wet oxidation	10

Chemical stabilization with lime	3
In-vessel composting, if controlled and operated by	
the operator as part of routine systems operations	10
Static pile composting, if controlled and operated by the	
operator as part of routine system operations	5
Solide Disposal	
Incineration if controlled and operated by the operator	
inclueration, in controlled and operated by the operator	10
I and application if controlled and operated by the	12
Land application, if controlled and operated by the	F
Sludge lesser	
Off-site disposal	1
Disinfaction	
Liquid and novedared hypochlarites	2
Additional points if hypochlaritae are concerted on site	כ ר
Additional points if hypochiornes are generated on-site	2 10
	12
Chlor-alkali on-site generation	12
Chlorination using tablets	اl
Ultraviolet light	3
Ozonation without pure oxygen	3
Ozonation with pure liquefied oxygen	4
Ozonation with on-site generation of pure oxygen	5
Dechlorination with gas	10
Dechlorination with chemical dechlorination agents other than gas	3
Dechlorination using tablets	1
Effluent Discharge	

Plant pumping of effluent	2
Effluent aeration	2

(2) for purposes of this subsection, community septic tanks will be considered part of the wastewater collection system, not a primary treatment method; and

(3) nutrient removal utilizing biological or combined chemical and biological processes for advanced waste treatment include one or more of the following methods:

(A) nitrification that utilizes those processes; if a facility nitrifies based solely on detention time or another extended aeration process, only the points for nitrification by extended aeration will be given;

- (B) denitrification;
- (C) phosphorous removal.
- (e) To classify water treatment systems under (b) of this section,

(1) the department will use the following point system:

## Item

## Points

## Size

Peak day design capacity, gallons per day:	
less than 10,000	1
10,000 – 50,000	2
50,001 – 100,000	4
100,001 – 500,000	9
500,001 – 1,000,000	
1,000,001 – 5,000,000	
5,000,001 - 10,000,000	20
10,000,001 - 50,000,000	25
greater than 50,000,000	

## Water Supply Source

Groundwater	2
Groundwater under the direct influence of surface water	4
Surface water	6
Surface water maintaining filtration avoidance criteria	
under 18 AAC 80.620	8
Seawater	10
Purchased treated water	0
Raw water storage tank	2
Kaw water storage tallk	·····3

## Pretreatment

Presedimentation basin	4
Hydrocyclone or similar sand separator device	2
Microscreen	3
Roughing filter:	
Cartridge filter	2
Non-backwashable strainer or filter	2
Gravel or rock filter	4
Backwashable granular media filter	8
Add-heat system to heat raw water	2

## Adjustment and Corrosion Control

pH adjustment	3
Corrosion inhibitor	3
Limestone or calcite contactor	2
Sequestration	3

## Treatments

In-line venturi-type	1
Mechanical or diffused	
Degasification	
Ion exchange	4
Non-regenerated sorption processes, including activated a	lumina,
modified activated alumina, and iron-based sorben	.ts3
On-site regeneration of sorption process media	
Activated carbon, if not included as a bed layer in another	filter:
Activated carbon cartridge or bag filter	2
Powdered activated carbon treatment	4
Granular activated carbon contactors	4
On-site regeneration of activated carbon	16
Chemical oxidation:	
Hypochlorite solution	
Gas chlorine	
Potassium permanganate	4
Hydrogen peroxide	5
Ozonation without pure oxygen	3
Ozonation with pure liquefied oxygen	4
Ozonation with on-site generation of pure oxygen	5
Coagulation:	
Primary coagulant	5
Coagulant aid, flocculent, or filter aid	3 points for each chemi
	added, up to a maximum
	12 points
Rapid mix units:	L
Mechanical mixers	5
Injection mixers	
In-line blender mixers	
In-line blender mixers In-line static mixers	
In-line blender mixers In-line static mixers Flocculation tanks:	
In-line blender mixers In-line static mixers Flocculation tanks: Hydraulic flocculator	
In-line blender mixers In-line static mixers Flocculation tanks: Hydraulic flocculator Mechanical flocculator	
In-line blender mixers In-line static mixers Flocculation tanks: Hydraulic flocculator Mechanical flocculator Sedimentation or clarification:	
In-line blender mixers In-line static mixers Flocculation tanks: Hydraulic flocculator Mechanical flocculator Sedimentation or clarification: Tube settlers	
In-line blender mixers In-line static mixers Flocculation tanks: Hydraulic flocculator Mechanical flocculator Sedimentation or clarification: Tube settlers Inclined-plate. Lamella-type or equivalent	
In-line blender mixers In-line static mixers Flocculation tanks: Hydraulic flocculator Mechanical flocculator Sedimentation or clarification: Tube settlers Inclined-plate, Lamella-type or equivalent Horizontal flow conventional clarifier.	
In-line blender mixers In-line static mixers Flocculation tanks: Hydraulic flocculator Mechanical flocculator Sedimentation or clarification: Tube settlers Inclined-plate, Lamella-type or equivalent Horizontal flow conventional clarifier Batch sedimentation	
In-line blender mixers In-line static mixers Flocculation tanks: Hydraulic flocculator Mechanical flocculator Sedimentation or clarification: Tube settlers Inclined-plate, Lamella-type or equivalent Horizontal flow conventional clarifier Batch sedimentation Adsorption clarifier	
In-line blender mixers In-line static mixers Flocculation tanks: Hydraulic flocculator Mechanical flocculator Sedimentation or clarification: Tube settlers Inclined-plate, Lamella-type or equivalent Horizontal flow conventional clarifier Batch sedimentation Adsorption clarifier Up-flow solids contact	
In-line blender mixers In-line static mixers Flocculation tanks: Hydraulic flocculator Mechanical flocculator Sedimentation or clarification: Tube settlers Inclined-plate, Lamella-type or equivalent Horizontal flow conventional clarifier Batch sedimentation Adsorption clarifier Up-flow solids contact Dissolved air flotation	
In-line blender mixers In-line static mixers Flocculation tanks: Hydraulic flocculator Mechanical flocculator Sedimentation or clarification: Tube settlers Inclined-plate, Lamella-type or equivalent Horizontal flow conventional clarifier Batch sedimentation Adsorption clarifier Up-flow solids contact Dissolved air flotation	
In-line blender mixers In-line static mixers Flocculation tanks: Hydraulic flocculator Mechanical flocculator Sedimentation or clarification: Tube settlers Inclined-plate, Lamella-type or equivalent Horizontal flow conventional clarifier Batch sedimentation Adsorption clarifier Up-flow solids contact Dissolved air flotation Combined rapid mix-coagulation-flocculation-sedi	
In-line blender mixers In-line static mixers Flocculation tanks: Hydraulic flocculator Mechanical flocculator Sedimentation or clarification: Tube settlers Inclined-plate, Lamella-type or equivalent Horizontal flow conventional clarifier Batch sedimentation Adsorption clarifier Up-flow solids contact Dissolved air flotation Combined rapid mix-coagulation-flocculation-sedi	

Slow sand	4
Granular media	8
Membrane filtration, including reverse osmosis, microfiltration, ultra	filtration, or
nanofiltration	8
Membrane filtration, integrated system	12
Diatomaceous earth	12
Electrodialysis, electrodialysis reversal, distillation	10
Lime softening	16
Recarbonation	8
Fluoridation:	
Sodium fluoride saturator	2
Sodium silicofluoride	3
Hvdrofluorosilicic acid	5
Disinfection:	
Liquid and powdered hypochlorites	3
Additional points if hypochlorites are generated on-site	2
Gas chlorine	12
Chlorination using tablets	1
Ammonia addition for chloramination	
using liquid ammonia solution	3
using ammonia gas	
Chlorine dioxide	12 8
Chlor-alkali on-site generation	
$\Omega$ and $\Omega$ without pure oxygen	3
Ozonation with pure liquefied oxygen	
Ozonation with on site generation of pure ovygen	+ 5
Ultraviolet light	·····3
Ultraviolet light for the purposes of meeting required inactivation	2 A
Water storage tark for the number of achieving contact time.	4
Finished water storage tank, for the purpose of achieving contact time	
Finished water storage tank, if the system serves rewer than 500 marviduals	01 100
service connections, and the territ has a connective of 1,000,000 college or more	2
the tank has a capacity of $1,000,000$ gallons of more	
the tank has a capacity of $50,000 - 999,999$ gallons	∠ 1
the tank has a capacity of less than 50,000 gallons	1
Pressure tanks	0
On-site treatment of system sludge or backwash:	0
Discharge to sewer or other off-site treatment	0
Discharge to on-site pond, septic tank, or lagoon	2
Mechanical dewatering	6
Filter backwash water or sludge supernatant recycling:	
groundwater source	2
surface water source	3

(2) for purposes of the point system set out in (1) of this subsection, the department will assign a point value to ozonation only once, even if ozonation is used to accomplish multiple water treatment objectives;

(3) for purposes of the point system set out in (1) of this subsection, a system with a water storage tank for the purpose of achieving contact time and with a water storage tank for the purpose of storing finished water will only be assigned a point value for the water storage tank used for the purpose of achieving contact time. (Eff. 8/21/78, Register 67; am 8/24/85, Register 95; am 1/18/2001, Register 157; am 12/3/2006, Register 180; am 11/21/2010, Register 196; am 11/26/2016, Register 220)

Authority: AS 46.30.010 AS 46.30.080 AS 46.30.090

**18 AAC 74.125. Transition for systems increasing in classification.** (a) If as required under 18 AAC 74.010(a) a supervising operator of a primary operating shift of a water or wastewater system was certified at a level equal to the classification on or before November 26, 2016 of the system under that operator's control, and that system increased in classification under 18 AAC 74.120 on November 26, 2016, that supervising operator of the primary shift must be certified on or before November 26, 2018 at a level equal to or greater than the higher classification.

(b) If as required under 18 AAC 74.010(a) a supervising operator of a secondary operating shift of a water or wastewater system was certified at no less than one level below the level equal to the classification on or before November 26, 2016 of the system under that operator's control, and that system increased in classification under 18 AAC 74.120 on November 26, 2016, that supervising operator of the secondary shift must be certified on or before November 26, 2018 at a level no less than one level below the higher classification.

(c) Repealed 11/26/2016.

(d) Repealed 11/26/2016. (Eff. 12/3/2006, Register 180; am 11/21/2010, Register 196; am 11/26/2016, Register 220)

Authority: AS 46.30.010 AS 46.30.080 AS 46.30.090

18 AAC 74.130. Training. Repealed 8/24/85.

**18 AAC 74.140. Water and wastewater works advisory board.** Repealed. (Eff. 8/21/78, Register 67; am 8/24/85, Register 95; repealed 1/18/2001, Register 157)

**Editor's note:** The subject matter formerly found in 18 AAC 74.140 can now be found in 18 AAC 74.850.

**18 AAC 74.150.** Composition of the water and wastewater works advisory board. Deleted 8/24/85.

**Editor's note:** Under AS 44.62.060(b) and 44.62.125(b), 18 AAC 74.150 was deleted by the regulations attorney 8/24/85 because it lacked statutory authority.

**18 AAC 74.160. Appeals.** Repealed. (Eff. 8/21/78, Register 67; am 8/24/85, Register 95; repealed 1/18/2001, Register 157)

**Editor's note:** The subject matter formerly found in 18 AAC 74.160 can now be found in 18 AAC 74.860.

**18 AAC 74.170. Fees.** Repealed. (Eff. 1/23/86, Register 97; am 5/29/93, Register 126; repealed 1/18/2001, Register 157)

**Editor's note:** The subject matter formerly found in 18 AAC 74.170 can now be found in 18 AAC 74.870.

## Article 2. Requirements for an Operator of a Small, Untreated or Small, Treated Water System.

#### Section

- 400. Applicability
- 405. Classification of small, untreated or small, treated water systems
- 410. Certified operator requirements for small, untreated or small, treated water systems
- 415. Contract operations
- 420. Certification requirements for operators of small, untreated or small, treated water systems
- 430. Examination requirements for operators of small, untreated or small, treated water systems
- 440. Experience and education requirements for operators of small, untreated or small, treated water systems
- 450. (Repealed)

**18 AAC 74.400. Applicability.** The requirements of 18 AAC 74.410 – 18 AAC 74.440 apply to a

(1) community or non-transient non-community water system that

(A) has fewer than 100 service connections;

(B) is used or intended for use by fewer than 500 individuals per day; and

(C) has been classified as a small, untreated or small, treated water system under 18 AAC 74.405;

(2) community or non-transient non-community water system that

- (A) has fewer than 15 service connections;
- (B) is used or intended for use by 500 or more individuals per day; and

(C) has been classified as a small, untreated or small, treated water system under 18 AAC 74.405; and

(3) transient non-community water system that

(A) uses a surface water source or a groundwater under the direct influence of surface water source; and

(B) has been classified as a small, treated water system under 18 AAC 74.405. (Eff. 1/18/2001, Register 157; am 12/3/2006, Register 180; am 11/21/2010, Register 196; am 11/26/2016, Register 220)

Authority: AS 46.30.010 AS 46.30.080

**18 AAC 74.405. Classification of small untreated or small, treated water systems.** (a) Except as provided in 18 AAC 74.006, the department will classify a community or non-transient non-community water system with fewer than 100 service connections that is used or intended for use by fewer than 500 individuals per day, a community or non-transient non-community water system with fewer than 15 service connections that is used or intended for use by more than 500 individuals per day, and a transient non-community water system that uses a surface water source or groundwater under the direct influence of surface water source, as follows:

(1) a water system that does not add chemicals to the water will be classified as a small, untreated water system;

(2) a water system that adds a single chemical to the water will be classified as a small, treated water system;

(3) for purposes of this section, the use of ultraviolet light to meet an inactivation requirement will be considered the equivalent of the addition of a single chemical. (Eff. 11/26/2016, Register 220)

Authority: AS 46.30.010 AS 46.30.080

Editor's note: The subject matter of 18 AAC 74.405 was formerly located at 18 AAC 74.450. The history note for 18 AAC 74.405 does not reflect the history of the earlier section.

**18 AAC 74.410. Certified operator requirements for small, untreated and small, treated water systems.** At all times, a public water system described in 18 AAC 74.400 must have an operator, certified at a level equal to or greater than the classification of the system, and

(1) on-site at the system; or

(2) able to be on-site at the system within three hours; if off-site under this paragraph, the operator shall be available by radio or telephone. (Eff. 1/18/2001, Register 157; am 11/26/2016, Register 220)

Authority: AS 46.30.010 AS 46.30.080

**18 AAC 74.415. Contract operations.** (a) The department may approve a plan for supervision of a water system described in 18 AAC 74.400 by a certified operator who supervises more than one water system. The department will include in its approval any terms and conditions that the department considers necessary to protect human health, safety, and welfare. The system owner must submit a request for approval under this subsection on a form provided by the department. The department will approve a request under this subsection if

(1) the supervising operator is certified at a level equal to or greater than the classification of the water system;

(2) the department determines that the supervising operator will oversee the system in compliance with the requirements of this chapter and 18 AAC 80; and

(3) the department determines that human health, safety, and welfare will be adequately protected.

(b) In approving or denying a request, or revoking an approval under (a) of this section, the department will consider

(1) the complexity of the system;

(2) the proposed frequency of routine visits by the certified operator;

(3) system accessibility;

(4) plans for response when emergency action is needed;

(5) the total number of systems the certified operator supervises;

(6) the compliance history of other systems under the supervision of the certified operator; and

(7) other factors relevant to system oversight or to the protection of human health, safety, and welfare. (Eff. 11/26/2016, Register 220)

Authority: AS 46.30.010 AS 46.30.080

**18 AAC 74.420. Certification requirements for operators of small, untreated or small, treated water systems.** (a) An individual seeking certification under 18 AAC 74.400 – 18 AAC 74.440 must submit a completed application to the department for the level of certification sought.

(1) on a form provided by the department;

(2) accompanied by the fee required by 18 AAC 74.870;

(b) Except as provided in (d) - (g) of this section, the department will certify an applicant who meets the

(1) examination requirements of 18 AAC 74.430;

(2) experience and education requirements of 18 AAC 74.440; and

(3) fee requirements of 18 AAC 74.870.

(c) An applicant must disclose past or pending disciplinary action by another certifying agency.

(d) When considering an individual's application for certification, the department may consider past or pending disciplinary action that another certifying agency imposed on the applicant in the applicant's capacity as an operator.

(e) The department may deny certification to an applicant whose certification has been revoked by another certifying agency.

(f) The department may deny certification to an applicant determined to have falsified or withheld information on the applicant's application.

(g) When acting under (d) – (f) of this section, the department will consider the factors set out in 18 AAC 74.830(b). (Eff. 1/18/2001, Register 157; am 12/3/2006, Register 180; am 11/26/2016, Register 220)

Authority: AS 46.30.010 AS 46.30.060 AS 46.30.080

**18 AAC 74.430. Examination requirements for operators of small, untreated or small, treated water systems.** (a) To be certified to operate a water system classified as a small, untreated system or small, treated system under 18 AAC 74.405, an individual must pass an approved and validated written examination that demonstrates the individual's skills, knowledge, ability, and judgment to operate a system of that classification in compliance with the requirements of this chapter and 18 AAC 80.

(b) Repealed 11/26/2016.

(c) A written validated examination will be held at least annually, at a time and place announced by the department. The individual shall pay the examination fee required by 18 AAC 74.870(b) when submitting a request for examination.

- (d) Repealed 12/3/2006.
- (e) Repealed 12/3/2006.

(f) The department will grade each examination administered under this section and notify each examinee of the results within 60 days after the examination. The department will not provide the completed, graded examination to the examinee. The examinee may review the examinee's examination results with the department.

(g) Repealed 11/26/2016. (Eff. 1/18/2001, Register 157; am 12/3/2006, Register 180; am 11/26/2016, Register 220)

Authority: AS 46.30.010 AS 46.30.050 AS 46.03.080

**18 AAC 74.440. Experience and education requirements for operators of small, untreated or small, treated water systems.** (a) The department will use the minimum education and experience requirements and substitution provisions of this section to evaluate an applicant's qualifications to operate a water system classified as a small, untreated or small, treated water system under 18 AAC 74.405.

(b) To be eligible to receive certification, an applicant for certification to operate a small, untreated water system must have at least

(1) a high school or general equivalency diploma, or have completed at least 12 years of education; and

(2) three months of operating experience at a system classified as a small, untreated water system or a greater classification.

(c) To be eligible to receive certification, an applicant for certification to operate a small, treated water system must have at least

(1) a high school or general equivalency diploma, or have completed at least 12 years of education; and

(2) six months of operating experience at a system classified as a small, treated water system or a greater classification.

(d) The minimum education requirements in (b)(1) and (c)(1) of this section are subject to the following provisions:

(1) the applicant must attest in the application to completion of the required education and must provide verification if requested by the department;

(2) if an applicant does not have a high school diploma, general equivalency diploma, or 12 years of education, the applicant may achieve the equivalent of 12 years of education through the following substitutions:

(A) one calendar year of experience operating a system classified at a level equal to or greater than the classification for which the applicant requests certification, may be substituted for either two years of education in grades one through eight or one year of education in grades nine through 12;

(B) 45 continuing education units (CEUs) of approved training may be substituted for one year of high school education; 10 hours of coursework equals one CEU; the department will approve training if that training is directly related to, or can be applied to, the operation, maintenance, or management of a water system;

(C) for small, untreated and small, treated water systems, the department

will waive the minimum education requirements of (b)(1) and (c)(1) of this section for an applicant who passes a written examination and an oral or practical examination;

(3) experience substituted under (2) of this subsection for an education requirement may not also be applied to satisfy the minimum experience requirements in (b)(2) and (c)(2) of this section.

(e) The minimum experience requirements in (b)(2) and (c)(2) of this section are subject to the following provisions:

(1) the applicant must attest in the application to satisfying the experience requirements, and must provide verification of required experience if requested by the department; and

(2) if an applicant does not have the required experience, the completion of an approved training course may be substituted; the department will approve training if that training is directly related to, or can be applied to, the operation, maintenance, or management of a water system. (Eff. 1/18/2001, Register 157; am 11/26/2016, Register 220)

Authority: AS 46.30.010 AS 46.30.080

18 AAC 74.450. Classification of small, untreated or small, treated water systems. Repealed. (Eff. 1/18/2001, Register 157; am 12/3/2006, Register 180; am 11/21/2010, Register 196; repealed 11/26/2016, Register 220)

Authority: AS 46.30.010 AS 46.30.080

**Editor's note:** The subject matter of 18 AAC 74.450 has been relocated to 18 AAC 74.405.

## Article 3. General Provisions.

### Section

- 800. Display of certificate
- 810. Expired certificates
- 820. Lapsed certificates
- 830. Disciplinary action
- 840. Temporary certification
- 845. (Repealed)
- 850. Water and wastewater works advisory board
- 860. Requests for review
- 870. Fees
- 900. Definitions

**18 AAC 74.800. Display of certificate.** The valid certificate must be displayed in the operator's plant, utility office, or business office of the public water or wastewater system where the certified operator is employed. (Eff. 1/18/2000, Register 157; am 12/3/2006, Register 180)

Authority: AS 46.30.060 AS 46.30.080

**Editor's note:** The subject matter of 18 AAC 74.800 was previously located at 18 AAC 74.060. The history note for 18 AAC 74.800 does not reflect the history of 18 AAC 74.060.

**18 AAC 74.810. Certificate term and renewal.** (a) A certificate, including a renewed certificate, is valid for a three-year period beginning on January 1 of the year of issuance.

(b) The department will send each certificate holder a renewal notice at least 60 days before the certificate expires. Notice will be mailed to the last address of record. The operator shall keep the department informed of the operator's current mailing address. Failure to receive notice does not relieve the holder of the responsibility to renew the certificate.

(c) During the three-year period in which the certificate is valid, an operator must complete approved continuing education courses as a condition for renewal of the certificate, as follows:

(1) for a small, untreated water system certification, an operator must complete approved courses equal to 0.5 drinking water core continuing education units (CEUs);

(2) for a small, treated water system certification, an operator must complete approved courses equal to one drinking water core CEU;

(3) for certification as an operator at the provisional level or level 1 -level 4 certification, an operator must complete approved courses equal to three CEUs of which two CEUs must be core and one CEU may be non-core.

(4) for certification to operate a wastewater treatment system classified as a wastewater stabilization pond system under 18 AAC 74.120(b)(1), an operator must complete approved courses equal to 0.5 core CEUs.

(d) An operator holding more than one certificate at the provisional level or level 1 -level 4 need complete only the courses required to satisfy renewal requirements for one of the certificates, but must complete the required courses at least every three years.

(e) The department will renew a certificate if an operator pays the fee required by 18 AAC 74.870(e), and is otherwise in compliance with this chapter.

(f) For purposes of this section, 10 hours of approved training equals one CEU. For applicable college courses one semester hour is equivalent to 1.5 CEUs and one quarter hour is equivalent to one CEU. The department will approve training if that training is related to, or can be applied to, the operation, maintenance, or management of a water or wastewater system as follows:

(1) drinking water core CEUs are those directly related to the drinking water industry or those integral to the operation and maintenance of a drinking water system;

(2) core CEUs are those directly related to the water or wastewater industry or those integral to the operation and maintenance of water or wastewater systems;

(3) non-core CEUs are those still relevant to the water or wastewater industry but indirectly related or peripheral to the industry;

(4) drinking water core and core CEUs may be repeated one time, not earlier than three years following the original course completion, for half CEU credit;

(5) non-core CEUs may not be repeated for credit;

(6) wastewater stabilization pond courses may be repeated, not earlier than three years following the original course completion, for full CEU credit for the renewal of wastewater stabilization pond certificates.

(g) Repealed 11/26/2016. (Eff. 1/18/2001, Register 157, am 12/3/2006, Register 180; am 11/21/2010, Register 196; am 11/26/2016, Register 220)

Authority: AS 46.30.060 AS 46.30.080

**Editor's note:** The subject matter of 18 AAC 74.810 was previously located at 18 AAC 74.070. The history note for 18 AAC 74.810 does not reflect the history of 18 AAC 74.070.

18 AAC 74.820. Expired certificates. (a) An individual who seeks renewal of an

expired certificate must submit a request for renewal to the department within 365 days after the certificate expires. The department will renew an expired certificate upon receipt of a request for renewal that includes proof of compliance with 18 AAC 74.810 and the expired certificate renewal fee required by 18 AAC 74.870. An individual with an expired certificate is not certified.

(b) The department will not renew a certificate that has expired by more than one year. An individual with a certificate that has expired by more than one year must seek recertification under 18 AAC 74.020 or 18 AAC 74.420. (Eff. 1/18/2001, Register 157; am 11/26/2016, Register 220)

## **Authority:** AS 46.30.080

**Editor's note:** The subject matter of 18 AAC 74.820 was previously located at 18 AAC 74.080. The history note for 18 AAC 74.820 does not reflect the history of 18 AAC 74.080.

**18 AAC 74.830. Disciplinary action.** (a) The department may enter into a consent agreement with an operator, issue a letter of reprimand to an operator, or suspend or revoke a certificate, upon a determination that one or more of the following acts of misconduct occurred:

- (1) fraud or deceit in obtaining the certificate;
- (2) fraud or deceit in plant record keeping;
- (3) gross negligence in the operation of a system;
- (4) a substantial violation of the requirements of this chapter or 18 AAC 80.

(b) When considering whether to enter into a consent agreement with an operator, issue a letter of reprimand to the operator, or suspend or revoke a certificate, the department will consider the potential threat to human health or the environment, the severity of the act of misconduct, and any previous acts of misconduct.

(c) The department will consider board recommendations in deciding whether to enter into a consent agreement with an operator, issue a letter of reprimand to an operator, or suspend or revoke a certificate. Not later than 30 days before the board meeting, the department will issue a notice to the operator, including a description of the allegations, the date, time, and location of the board meeting, and how the operator can participate in the meeting. If the alleged act of misconduct poses a clear and immediate threat to public health or environment, the department may waive the 30-day notice in order to hold an immediate meeting of the board, while still providing appropriate notice to the operator. Not later than 10 days after the meeting, the board shall issue a recommendation to the department based on a presentation of facts, including the testimony of the operator. The department will issue a decision not later than 30 days after receiving the board's recommendation.

(d) An operator whose certificate has been suspended may not be the supervising operator of a system type that is the same as the system type for which the certificate that has been suspended was originally issued.

(e) An operator whose certificate has been suspended may have the certificate reinstated at the end of the suspension period if the certificate renewal requirements of 18 AAC 74.810 are met. The operator shall pay the certificate reinstatement fee required by 18 AAC 74.870(i) at the time of certificate reinstatement.

(f) An operator whose certificate has been revoked will not be issued further certification and shall forfeit all other valid certificates indefinitely. An operator whose certificate has been revoked may not serve as an operator at any water or wastewater system.

(g) If an operator's certificate has been suspended, the operator may not use operating experience gained during suspension to satisfy the experience requirements of 18 AAC 74.050 or 18 AAC 74.440.

(h) A disciplinary action is a department decision that is subject to review under 18 AAC 74.860. The commissioner will not participate in a decision made under this section. (Eff. 1/18/2001, Register 157; am 11/26/2016, Register 220)

Authority:	AS 46.30.030	AS 46.30.080	AS 46.30.090
-	AS 46.30.060		

**Editor's note:** The subject matter of 18 AAC 74.830 was previously located at 18 AAC 74.100. The history note for 18 AAC 74.830 does not reflect the history of 18 AAC 74.100.

**18 AAC 74.840. Temporary certification.** In compliance with AS 46.30.110, the department will issue a temporary certificate unless the department determines that human health, safety, and welfare would not adequately be protected. The temporary certificate is valid until the earliest date when the operator may be examined and certified under this chapter. A temporary certificate applies only to the system that the applicant is operating at the time of application, and will not be renewed. The fee required by 18 AAC 74.870(h) must be paid before a temporary certificate will be issued. (Eff. 1/18/2001, Register 157; am 11/26/2016, Register 220)

Authority: AS 46.30.080 AS 46.30.110

**Editor's note:** The subject matter of 18 AAC 74.840 was previously located at 18 AAC 74.110. The history note for 18 AAC 74.840 does not reflect the history of 18 AAC 74.110.

**18 AAC 74.845. Certification of an operator of an existing water system.** Repealed. (Eff. 1/18/2001, Register 157; repealed 12/3/2006, Register 180)

## 18 AAC 74.850. Water and wastewater works advisory board. The board shall

(1) advise and assist the department as the department certifies operators and classifies water and wastewater systems;

(2) review qualifications of applicants for certification in cooperation with the department or at the applicant's request;

(3) advise the department as the department prepares and gives examinations;

(4) make recommendations to the department as the department issues a letter of reprimand to an operator or suspends or revokes a certificate;

(5) assist the department in determining the number of certified operators needed for proper system operation;

(6) make recommendations to the legislature and the governor for legislation concerning operation and maintenance of public water and wastewater systems;

(7) assist and advise the department as the department develops and administers a training program; and

(8) give other assistance as requested by the department. (Eff. 1/18/2001, Register 157; am 11/26/2016, Register 220)

Authority: As 46.30.020 AS 46.30.030 AS 46.30.060

**Editor's note:** The subject matter of 18 AAC 74.850 was previously located at 18 AAC 74.140. The history note for 18 AAC 74.850 does not reflect the history of 18 AAC 74.140.

**18 AAC 74.860. Requests for review.** (a) Within 30 days after receiving a department decision under this chapter, the applicant, operator, system owner, or other person adversely affected by the decision may request a review of the decision by the director. The request must be made in writing to the director and must include

(1) the name, mailing address, and telephone number of the requestor;

(2) a description of the matter being reviewed, including applicable facts regarding classifications or determinations; and

(3) a clear and concise statement of the basis for the request, including

(A) a statement of the nature and scope of the interests of the requestor, and an explanation of how and to what extent those interests would be directly and adversely affected by the department's decision; and

(B) the contested terms or conditions, and proposed alternatives.

(b) Upon receipt of a request for review, the director, or a designee who is a department employee other than the individual who issued the contested decision, shall decide if the request has merit, or if the original decision by the department is satisfactory. If the director or designee decides that the request does not merit a review, the requestor shall be notified in writing of this decision, and of the reasons for the decision. The denial must include the statement that the requestor may seek and adjudicatory hearing under 18 AAC 15.200.

(c) Within 60 days after the director or designee grants a review of a decision, the board shall hold a meeting to review the original decision, consider any additional information provided, and develop a recommendation. Not later than 30 days before the board meeting, the department will issue a notice to the requestor of the review, including the date, time, and location of the board meeting and how the requestor can participate. Within 10 days after the board meeting, the board shall issue a recommendation to the director or designee. The commissioner will not participate in the board meeting or development of the board's recommendation.

(d) Within 30 days after receipt of the board's recommendation and any additional information, the director or designee shall issue a final decision. The decision must include the statement that the requestor may seek an adjudicatory hearing under 18 AAC 15.200. (Eff. 1/18/2001, Register 157; am 11/26/2016, Register 220)

Authority: AS 46.03.020 AS 46.30.080

**Editor's note:** The subject matter of 18 AAC 74.860 was previously located at 18 AAC 74.160. The history note for 18 AAC 74.860 does not reflect the history of 18 AAC 74.160.

**18 AAC 74.870. Fees.** (a) A fee listed in this section is nonrefundable except as provided in (c) and (m) of this section.

(b) The fee for each examination to be taken is \$150.

(c) If the department if notified in writing at least two weeks before a written examination date that an applicant cannot take a scheduled examination and wishes to be rescheduled, the examination fee paid by the applicant will be applied to the next examination cycle without a new reregistration.

(d) The fee to apply for certification is \$100.

(e) The fee to renew an active certificate is \$100.

(f) The fee to renew an expired certificate not later than 90 days after the certificate expires is \$150.

(g) The fee to renew an expired certificate later than 90 days but not later than 365 days after the certificate expires is \$300.

(h) The fee to apply for a temporary certificate is \$100.

(i) The fee to reinstate a suspended certificate is \$300.

(j) The fee to apply for reciprocity, as described in AS 46.30.100, is \$300.

(k) The fee for a replacement certificate is \$50.

(*l*) The fee for a department-sponsored operator training classroom course is \$150 per day. The fee is nonrefundable, except as provided in (m) of this section.

(m) The department will cancel an operator training classroom course with fewer than 10 students registered. If the department cancels a course, the fee paid under (l) of this section will be refunded.

(n) The fee for a department-sponsored correspondence course providing continuing education unit (CEU) credits, is \$20 per CEU plus the cost of course materials. (Eff. 1/18/2001, Register 157; am 12/3/2006, Register 180; am 11/21/2010, Register 196; am 11/26/2016, Register 220)

Authority:	AS 44.46.025	AS 46.30.060	AS 46.30.100
	AS 46.30.030	AS 46.30.080	AS 46.30.110
	AS 46.30.050		

**Editor's note:** The subject matter of 18 AAC 74.870 was previously located at 18 AAC 74.170. The history note for 18 AAC 74.870 does not reflect the history of 18 AAC 74.170.

18 AAC 74.900. Definitions. Unless the context indicates otherwise, in this chapter

(1) "applicant" means a person seeking a certificate under this chapter;

(2) "approved" means approved by the department;

(3) "board" means the Water and Wastewater Works Advisory Board created by AS 46.30.020;

(4) "certificate" means a certificate of competency, issued to an operator by the department, stating that the operator has met the requirements for the specified level of the certification program;

(5) "CEU" means continuing education unit;

(6) "community water system" has the meaning given in 18 AAC 80.1990;

(7) "department" means the Department of Environmental Conservation;

(8) "director" means the director of the department's division in which the operator certification program under AS 46.30 resides;

(9) "groundwater under the direct influence of surface water" has the meaning given in 18 AAC 80.1990;

(10) "main line lift station" means a pumping facility that is designed to lift wastewater from a portion of the main line at an elevation to another portion of the main line at a higher elevation; "main line lift station" does not include a wastewater sump from which wastewater is pumped from a household, building, building complex, or septic tank into the main line;

(11) "non-transient non-community water system" has the meaning given in 18 AAC 80.1990;

(12) "on-site" means to be present at a system during normal operations;

(13) "operating experience" means the time spent at a system in satisfactory performance of operation duties;

(14) repealed 11/26/2016;

(15) "operator" means a person engaged in the operation of a water supply or wastewater system; "operator" does not ordinarily mean an official, such as the city engineer or public works superintendent, exercising only general administrative supervision;

(16) repealed 11/26/2016;

(17) "public water system" has the meaning given in 18 AAC 80.1990;

(18) "service connection" means a pipe, with all its parts, that connects a water or sewer main with building plumbing;

(19) "supervising operator" means an operator who makes process control and system integrity decisions about water quality or quantity that affect human health, safety, and welfare;

(20) "surface water" has the meaning given in 18 AAC 80.1990;

(21) "system" means a water system or a wastewater system;

(22) "transient non-community water system" has the meaning given in 18 AAC 80.1990;

(23) "validated examination" means an examination that is independently reviewed by subject matter experts to ensure that it is based on a job analysis and related to the classification of the system;

(24) "wastewater collection system" means pipelines or conduits, pumping stations and force mains, and all other related constructions, devices, and appliances used to conduct wastewater to a wastewater treatment system;

(25) "wastewater system" means the system of pipes, structures, equipment, and processes required to collect, carry away, and treat domestic or industrial wastewater and dispose of the effluent;

(26) "wastewater treatment system" means devices, structures, and equipment used to treat, neutralize, stabilize, or dispose of wastewater and residuals;

(27) "water distribution system" means post-treatment storage facilities, conduits, mains, lines, pumping stations, or other devices used to carry water to the consumer;

(28) "water system" means any source of water, intake works, collection system, treatment works, storage facility, or distribution system from which water is available for human consumption; "water system" includes systems providing water to more than one residence, or to a factory, office building, restaurant, school, or similar facility, "water system" does not include a system serving only a single-family residence;

(29) "water treatment system" means devices, structures, and equipment used to condition, purify, or refine water for human consumption;

(30) "community septic tank" means a septic tank that serves

(A) one or more multi-family dwellings;

- (B) a mobile home park, a trailer park, or a recreational vehicle park;
- (C) two or more

(i) private residences; in this sub-paragraph, "private residence" has the meaning given in 18 AAC 72.990;

- (ii) commercial establishments;
- (iii) industrial establishments; or
- (iv) institutions; or

(D) a combination of two or more of the structures listed in (C)(i) - (iv) of this paragraph;

(31) "examinee" means an individual who has registered for a certification examination. (Eff. 8/21/78, Register 67; am 2/21/81, Register 77; am 8/24/85, Register 95; am 5/29/93, Register 126; am 1/18/2001, Register 157; am 12/3/2006, Register 180; am 11/26/2016, Register 220)

Authority: AS 46.30.080

**Editor's note:** As of Register 180 (January 2007), the definitions in 18 AAC 74.900 were reorganized to put them in alphabetical order, regardless of when each of them was adopted.