

#### NOTICE OF PUBLIC RULEMAKING HEARING

#### **BEFORE THE**

#### WATER AND WASTEWATER FACILITY OPERATORS CERTIFICATION BOARD

#### SUBJECT:

For consideration of proposed revisions to Regulation No. 100, "Water and Wastewater Facility Operators Certification Requirements" (5 CCR 1003-2). The revisions to Regulation No. 100 proposed by the Water Quality Control Division, along with proposed Statement of Basis, Statutory Authority and Purpose, are attached to this notice as Exhibit 1. Proposed new language is shown with <a href="mailto:double-underlining">double-underlining</a> and proposed deletions are shown with <a href="mailto:strikeouts">strikeouts</a>.

#### **HEARING SCHEDULE:**

DATE: Tuesday, November 29, 2016

TIME: 9:00 a.m.

PLACE: Florence Sabin Conference Room

Colorado Department of Public Health and Environment

4300 Cherry Creek Drive South

Denver, CO 80246

#### WRITTEN AND ORAL COMMENTS:

The Operators Certification Board encourages all interested persons to provide their opinions or recommendations regarding the matters to be addressed in this rulemaking hearing. Oral comments on the proposed rule will be received at the hearing. Depending on the number of people wishing to speak, a time limit for oral comments may be established.

In order to enhance the Board members' ability to review and consider public comments on the proposal, the submission of written comments in advance of the hearing is strongly encouraged. Initial written comments are due by October 17, 2016 and any written responsive comments must be received by November 16, 2016.

Anyone providing written comments should deliver an electronic copy to <a href="mailto:cdphe.wwfocb@state.co.us">cdphe.wwfocb@state.co.us</a>. All written comments will be available to the public on the Board's website.

#### SPECIFIC STATUTORY AUTHORITY:

The provisions of C.R.S. 25-9-101 through 25-9-110 provide the specific statutory authority for consideration of the regulatory provisions proposed by this notice. Should the Operators

Certification Board adopt the regulatory language as proposed in this notice or alternative provisions, it will also adopt, in compliance with section 24-4-103(4) C.R.S., an appropriate Statement of Basis, Specific Statutory Authority, and Purpose.
Dated this 31 <sup>st</sup> day of August 2016 at Denver, Colorado.
WATER AND WASTEWATER FACILITY OPERATORS CERTIFICATION BOARD

Trisha Oeth, Administrator

### EXHIBIT 1 WATER QUALITY CONTROL DIVISION

# COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT WATER AND WASTEWATER FACILITY OPERATORS CERTIFICATION REQUIREMENTS

#### **REGULATION NO. 100**

#### 5 CCR 1003-2

#### 100.1 <u>AUTHORITY AND PURPOSE</u>

100.1.1 Authority

This regulation is promulgated pursuant to the sections 25-9-101 through 110, C.R.S.

#### 100.1.2 Purpose

Article 9 of Title 25, C.R.S., requires that every water treatment facility, domestic or industrial wastewater treatment facility, wastewater collection system and water distribution system be under the supervision of a certified operator, holding a certificate in a class equal to or higher than the class of the facility or system.

Certification under this statute is available to all persons who meet the minimum qualifications of a given classification as described in section 100.913. Operators are encouraged to apply for certification in the highest classification consistent with their qualifications.

#### 100.1.3 Severability

The provisions of these regulations are severable. If any regulation, rule, section, paragraph, or other portion of the *Water and Wastewater Facility Operators Certification Requirements* is, for any reason, held inoperative, unconstitutional, void or invalid, the validity of the remaining portions shall not be affected.

#### 100.1.4 Applicability

The Water and Wastewater Facility Operators Certification Requirements apply to:

- (a) Each person who meets the qualification for certification.
- (b) The owners of water and wastewater facilities.
- (c) In accordance with Article 9 of Title 25, section 104.4, C.R.S., the Board has the authority to exempt certain water and wastewater facilities from operating under the supervision of a certified operator in responsible charge if the exemption does not endanger the public health or the environment.

#### 100.1.5 Automatic Exemptions

- (a) The following facilities are exempt from the requirement to operate under the supervision of a certified operator in responsible charge:
  - (i) Water treatment facilities that are not "public water systems" subject to the Colorado Primary Drinking Water Regulations, 5 CCR 1002-11.
  - (ii) Water distribution systems whose entire distribution system falls within the jurisdiction of the Water Well Construction and Pump Installation Contractors Act, C.R.S. 37-91-101, et seq.
  - (iii) Water distribution systems that are not "public water systems" subject to the Colorado Primary Drinking Water Regulations, 5 CCR 1002-11.
  - (iv) Industrial wastewater treatment facilities that satisfy the following criteria:
    - (A) The quality of the wastewater discharged is such that discharge permit limits can be met utilizing only passive treatment (treatment in which chemical, mechanical, or biological treatment techniques are not utilized) or no treatment;
    - (B) The facility has designated a responsible person who is specifically responsible for overseeing the facility's operation and for ensuring compliance with the facility's discharge permit, including monitoring and reporting requirements. "Responsible person" means an individual, designated by the owner of a wastewater facility, who is specifically responsible for overseeing the facility's operation and for ensuring compliance with the facility's discharge permit and who receives relevant training with respect to these duties including, as appropriate, specific measures used to meet effluent limits, monitoring, inspection, planning, reporting, and documentation requirements; and
    - (C) Discharge under one of the following general industrial permits:
      - (I) Industrial stormwater permit,
      - (II) Construction stormwater permit,
      - (III) Municipal stormwater permit,
      - (IV) Industrial facilities that discharge under the following general permits:
        - (1) Construction Dewatering Activities;
        - (2) Aquatic Animal Production:
        - (3) Sand and Gravel Process Water and Stormwater;
        - (4) Minimal Industrial Discharge;
        - (5) Subterranean Dewatering and Well Development;

- (6) Hydrostatic Testing of Pipelines,
- (7) Tanks and Similar Vessels;
- (8) Non-Contact Cooling Water;
- (9) Pesticides; or
- (10) Commercial Washing of Outdoor Structures.
- (v) Category A, B, and C graywater treatment facilities as defined in Graywater Control Regulation, 5 CCR 1002-86.
- (b) Facilities that discharge pursuant to a general industrial permit for Water

  Treatment Plant Wastewater Discharge are not required to be under the
  supervision of a industrial wastewater treatment certified operator in responsible
  charge if the facility is under the supervision of a water treatment certified
  operator in responsible charge who is specifically responsible for overseeing the
  facility's operation and for ensuring compliance with the facility's discharge
  permit, including monitoring and reporting requirements.

#### 100.1.6 Discretionary Exemptions

- 100.6.1(b)(iii)(a)

  A facility which discharges pursuant to either an individual industrial wastewater discharge permit or a general industrial permit not listed in 100.6.1(b)(i) above may request classification by the Board as a class 2 facility.Wastewater Facilities Any wastewater facility that does not qualify for an automatic exemption under section 100.1.5 may request an exemption from the Board from the requirement to operate under the supervision of a certified operator in responsible charge. In determining whether to grant such an exemption, the Board may consider:
  - (i) Discharges of limited duration:
  - (ii) The sensitivity of the receiving waters;
  - (iii) The level of toxic pollutants in the discharge;
  - (iv) Situations where chemical, mechanical, or biological treatment techniques are not required to meet permit limits, including sedimentation ponds at mining operations for construction materials, as defined by section 34-32.5-103 (3), C.R.S.;
- (b) Water Facilities Any water facility that does not qualify for an automatic exemption under section 100.1.5 may request an exemption from the Board from the requirement to operate under the supervision of a certified operator in responsible charge. In determining whether to grant such an exemption, the Board may consider:
  - (i) The classification of the facility as public or nonpublic under the *Colorado Primary Drinking Water Regulations*, 5 CCR 1002-11;
  - (ii) The applicability of the *Colorado Primary Drinking Water Regulations*, 5 CCR 1002-11, to the facility or class of facilities; and

- (iii) A distribution system having a minimal number of connections.
- (c) Industrial Wastewater Treatment Facilities Any industrial wastewater treatment facility that does not qualify for exemption under section 100.1.5 may request exemption from the requirement to operate under the supervision of a certified operator in responsible charge. In determining whether to grant such an exemption, the facility must demonstrate to the Board's satisfaction that:
  - (i) The quality of the industrial wastewater discharged is such that discharge permit limits can be met utilizing only passive treatment (treatment in which chemical, mechanical, or biological treatment techniques are not utilized) or no treatment; and
  - (ii) The facility has designated a responsible person who is specifically responsible for overseeing the facility's operation and for ensuring compliance with the facility's discharge permit, including monitoring and reporting requirements. "Responsible person" means an individual, designated by the owner of an industrial wastewater facility, who is specifically responsible for overseeing the facility's operation and for ensuring compliance with the facility's discharge permit and who receives relevant training with respect to these duties including, as appropriate, specific measures used to meet effluent limits, monitoring, inspection, planning, reporting, and documentation requirements.
- The Division shall evaluate a written request <u>for exemption</u> from the facility and shall provide the Board with a <del>classification</del>-recommendation based <del>upon the criteria in part (A) of this subsection and upon the criteria listed in sections 25-9-104(4)(a) through (d), C.R.S.sections 100.1.6(a-c), as appropriate.</del>
- 100.6.1(b)(iii)(C)(vie) The Board shall approve or deny such classification requests at a regularly scheduled Board meeting.
- 100.6.1(b)(iv)(viif) The Board has the authority to reclassify remove a facility exemptionary facility if the facility fails to comply with the requirements of its discharge permit or if the facility's operational practices result in a direct, negative impact on the public health or the environment.
- 100.6.1(b)(ii)(g) If at any time the facility does not meet the applicable conditions of sections 100.6.1(b)(ii)100.1.6(a-c), the facility must notify the Division, in writing, and begin operating under the supervision of a certified operator in responsible charge within 30 days of the change in operations.

#### <u>100.1.7 Exceptions</u>

The Board may make exceptions to this regulation, if the exception is not in conflict with its enabling statute, sections 25-9-101 et. seq., C.R.S., and does not endanger public health or the environment, through an adjudicatory hearing process in accordance with section 100.424-4-105, C.R.S.

#### 100.2 DEFINITIONS

(1) "BOARD" means the Water and Wastewater Facility Operators Certification Board created by section 25-9-103, C.R.S.

- (2) "CERTIFICATE" means the certificate of competency issued by the Board stating that the operator named thereon has met the requirements for the specified classification of the certification program.
- (3) "CERTIFIED OPERATOR" means any person who has responsibility for the operation of any water and wastewater facility and is certified in Colorado as a "Certified Water Professional" ("CWP") in accordance with the provisions of this regulation. For purposes of this regulation, having "responsibility for the operation" of a water and wastewater facility refers generally to being qualified to perform various operational activities at such facilities in the capacity of a CWP.
- (4) "CERTIFIED OPERATOR IN RESPONSIBLE CHARGE" means the certified operator who is designated by the water or wastewater facility owner to be responsible for making process control and/or system integrity decisions about water quality or quantity that may affect public health or the environment. A facility owner may designate one or more certified operators to serve in this capacity. Such an operator must be certified at a level equal to or higher than the classification of the facility he or she is operating.
- (5) "CLASSIFICATION OF A WATER OR WASTEWATER FACILITY" means the level of operational complexity and/or size of a water or wastewater facility as determined by the Division.
- (6) "DEPARTMENT" means the Colorado Department of Public Health and Environment.
- (7) "DIVISION" means the Water Quality Control Division within the Colorado Department of Public Health and Environment.
- (8) "DOMESTIC WASTEWATER TREATMENT FACILITY" means any facility or group of units used for the treatment of domestic wastewater or for the reduction and handling of solids and gases removed from such wastes, whether or not such facility or group of units is discharging into state waters. "Domestic wastewater treatment facility" specifically excludes on-site wastewater treatment systems.
- (9) <u>"GRAYWATER TREATMENT FACILITY" means a graywater treatment works as defined in the *Graywater Control Regulation*, 5 CCR 1002-86.</u>
- (10) "INDUSTRIAL WASTEWATER TREATMENT FACILITY" means any facility or group of units used for the pretreatment, treatment, or handling of industrial waters, wastewater, reuse water, and wastes that are discharged into state waters. "Industrial wastewater treatment facility" includes facilities that clean up contaminated ground water or spills; except that such term does not include facilities designed to operate for less than one year or facilities with in-situ discharge.
- (1011) "OPERATOR" means any person who performs activities and/or tasks pertinent to the operation of a water or wastewater facility. An operator may or may not be certified.
- (44.12) "OWNER" means (a) the supplier of water as defined in 5 CCR 1002-11; (b) the person or persons required to apply for a discharge permit in accordance with 5 CCR 1002-61; or (c) the person with legal responsibility for a wastewater collection system or a graywater treatment facility. For purposes of this definition, "person" means an individual, corporation, partnership, association, state or political subdivision thereof, federal agency, tribal agency, state agency, municipality, commission, or interstate body.

- (1213) "PLANT DESIGN FLOW" means the maximum flow rate (water) or the hydraulic capacity (wastewater) approved for a water or wastewater treatment facility by the Division.
- (1314) "TRAINING UNIT" means the credit given for an increment of training approved as applicable to the fulfillment of certificate renewal requirements. Ten contact hours shall be required to equal one training unit. A "contact hour" means a classroom or supervised hour of attendance or hour of participation recognized by the Board as a training unit.
- (1415) "VALIDATED EXAMINATION" means an examination that is independently reviewed by subject matter experts to ensure that the examination is based on a job analysis and is related to the classification of the system or facility.
- (4516) "WASTEWATER COLLECTION SYSTEM" means a system of pipes, conduits, and associated appurtenances that transports domestic wastewater from the point of entry to a domestic wastewater treatment facility. The term does not include collection systems that are within the property of the owner of the facility.
- (1617) "WASTEWATER TREATMENT FACILITY" means either a domestic wastewater treatment facility or an industrial wastewater treatment facility.
- (4718) "WATER AND/OR WASTEWATER FACILITY" means a water treatment facility, domestic wastewater treatment facility, industrial wastewater treatment facility, water distribution system, or wastewater collection system.
- (1819) "WATER DISTRIBUTION SYSTEM" means any combination of pipes, tanks, pumps, or other facilities that delivers water from a source or treatment facility to a consumer.
- (1920) "WATER TREATMENT FACILITY" means the facility or facilities within the water distribution system that can alter the physical, chemical, or bacteriological quality of the water.

### 100.3 <u>ADMINISTRATIVE FUNCTIONS WATER QUALITY CONTROL DIVISION AND CONTRACTOR DUTIES; APPEALS OF DETERMINATIONS</u>

- 100.3.1 The Colorado Water Quality Control Division oversees state-wide implementation of this regulation with respect to owner compliance and operator discipline. The local city, city and county, or county with a local graywater control program has exclusive enforcement authority regarding compliance with the ordinance or resolution and, if applicable, rule, including the certified operator in responsible charge requirements for graywater facilities.
- 100.3.21 In carrying out its responsibilities to administer the operator certification program pursuant to Article 9 of Title 25, C.R.S., the Board may select and appoint, through contract, one or more independent nonprofit corporations ("contractors") toor its designee may carry out any of the following duties, including but not limited to:
  - (a) administering the operator certification program;
  - (b) with the prior approval of the Board for each agreement, a nonprofit corporation contracted by the Board may enter into subsidiary agreements with other nonprofit corporations, educational institutions, and for-profit corporations to carry out the duties assigned by the Board.
  - (bc) collecting program fees for administration of the operator certification program;

- (ed) administering validated examinations for operator certification;
- (de) maintaining records of certified operators;
- \_(e) maintaining records of water and wastewater facilities;
- (f) notifying operators of expiration of certificates;
- (g) providing information on accredited training programs and training requirements;
- (h) preparing and/or furnishing validated examinations and related materials;
- (i) collecting fees for examinations and administration of examinations;
- (j) setting times, dates, and places for holding examinations;
- (k) ensuring the accurate and unbiased grading of examinations;
- (I) evaluating work experience of applicants;
- (m) evaluating and approving training units for renewal of certificate;
- (n) evaluating and approving making recommendations for requests for certification based upon reciprocity;
- (o) recording results of examinations;
- (p) notifying applicants of their examination results;
- (q) recommending issuance of certificates or issuing certificates in accordance with Board criteria; or
- (r) conducting failed exam reviews; or
- (sr) preparing and distributing annual reports.
- 100.3.3 The Board retains the final authority for all actions and decisions carried out on behalf of the Board by a nonprofit corporation, educational institution, or for-profit corporation.
- 100.3.4 Any certified operator, certified operator in responsible charge, or other person affected or aggrieved by a decision of the Division or the Board's contractor(s) may request a hearing before the Board within thirty (30) days of notice of such decision by submitting a request containing the following information:
  - (a) identification of the person(s) requesting the hearing and the subject matter of the request;
  - (b) the statutory and/or regulatory authority and factual basis for the request; and
  - (c) the relief requested.

100.21.3100.3.5 The Board shall grant any hearing request made pursuant to section 100.3.4 100.21.1 or 100.21.2 of this regulation and shall schedule and conduct an adjudicatory hearing in accordance with section 24-4-105, C.R.S.

#### 100.4 WATER TREATMENT FACILITY CLASSIFICATION

- 100.4.1 Water treatment facilities shall be classified in accordance with the following four classes; Class D, Class C, Class B, or Class A. Class A is the highest level of classification and Class D is the lowest level of classification. The Division may make changes in classification in accordance with the needs created by particular complexities of any specific water treatment facility based on consideration of facility specific factors, including, but not limited to:
  - (a) special features of design;
  - (b) source of supply which make operation more difficult than normal; or
  - (c) a combination of such conditions.

100.4.2 Table - Criteria for Water Treatment Facility Classes A, B, C, and D

100.4.2 Table - Chieffa for Water Treatment Facility Classes A, B, C, and D				
	Plant Design Flow (in MGD)			
Description of the Facility	Below 2	2-5	5.01 – 9.99	10 or more
Ground Water Systems				
(a) Ground water source with no treatment or with no additional treatment beyond chlorine disinfection.	D	D	С	В
(b) Ground water source with ultraviolet or ozone disinfection.	D	С	С	В
(c) Ground water source utilizing chemical addition and/or a treatment technology (for example, ion exchange, reverse osmosis, membrane filters, or activated carbon) for the specific purpose of meeting secondary drinking water standards.	С	С	В	В
All Water Systems				
(d) Any source utilizing bag or cartridge filtration to comply with primary drinking water standards <sup>1</sup> . "Bag or cartridge filtration" means a filtration system consisting of a fixed filter housing into which flexible (bag) or rigid (cartridge) filters are inserted. Both bag and cartridge filters are disposable and cannot be backwashed or reused.	D			

(e) Any source utilizing a treatment technology (for example, slow sand, diatomaceous earth, membrane filtration, ion exchange, activated carbon filtration, reverse osmosis) with disinfection to comply with primary drinking water standards and which is not listed in sections 100.4.2(d) or 100.4.2(f) of this regulation.	С	В	В	A
(f) Any source utilizing conventional or direct filtration with disinfection to comply with primary drinking water standards. "Conventional filtration treatment" means a series of processes including coagulation, flocculation, sedimentation, and filtration resulting in substantial particulate removal. "Direct filtration treatment" means a series of processes including coagulation and filtration, but excluding sedimentation, resulting in substantial particulate removal.	В	А	A	A
Chemical Addition				
(g) Any source utilizing chemical treatment for the specific purpose of complying with secondary drinking water standards <sup>2</sup> .	С	С	В	В
(h) Any source utilizing additional chemical treatment, with the exception of corrosion control in the distribution system and disinfection for the specific purpose of complying with primary drinking water standards <sup>1</sup> .	В	В	А	A
(i) Any source utilizing chemical treatment for the specific purpose of controlling corrosion (i.e., lead and copper) in the distribution system.	С	С	В	В
(j) Any source utilizing fluoridation.	С	С	С	В
Other				
(k) Water vending machines connected to a public water system that does not currently meet primary drinking water standards <sup>1</sup> .	С	С	С	С

<sup>&</sup>quot;Primary drinking water standard" means any of the set of enforceable maximum contaminant levels for drinking water regulated under the Colorado Primary Drinking Water Regulations, 5 CCR 1002-11.

100.4.3 The classification of any water treatment facility may be changed at the discretion of the Division by reason of based on changes in any condition or circumstance on which since the last classification was predicated determination.

<sup>&</sup>quot;Secondary drinking water standard" means any of the set of secondary maximum contaminant levels for drinking water regulated under the Colorado Primary Drinking Water Regulations, 5 CCR 1002-11. These standards are not enforceable, but are intended as guidelines.

- 100.4.4 Any drinking water treatment facility that utilizes a combination of two or more of the treatment processes described in section 100.4.2 of this regulation—shall be classified in accordance with the highest level of treatment process utilized.
- 100.4.5 Water treatment facilities that are not "public water systems" subject to the *Colorado Primary Drinking Water Regulations*, 5 CCR 1002-11, shall be exempt from the requirement to operate under the supervision of a certified operator in responsible charge, and thus meet the exemption criteria in section 100.1.5(a) are exempt from the requirement to operate under the supervision of a certified operator in responsible charge and shall not be classified.

#### 100.5 DOMESTIC WASTEWATER TREATMENT FACILITY CLASSIFICATION

- 100.5.1 Domestic wastewater treatment facilities and category D non-single family, indoor toilet and urinal flushing graywater treatment facilities shall be classified in accordance with the following four classes: Class D, Class C, Class B, or Class A. Class A is the highest level of classification and Class D is the lowest level of classification. The Division may make changes in classification in accordance with the needs created by particular complexities of any specific domestic wastewater treatment facility based on consideration of facility specific factors, including, but not limited to:
  - (a) design features or other characteristics that make the facility more difficult to operate than usual;
  - (b) facility design flow;
  - (c) the character and volume of wastes to be treated;
  - (d) the facility's design being approved under the Department's variance procedure;
  - (e) a waste unusually difficult to treat;
  - (f) flow conditions, use classifications and/or water quality standards assigned to the waters receiving the treated effluent that require an unusually high degree of plant operational control in order to meet permit conditions; or
  - (g) combinations of such conditions or circumstances.

100.5.2 Table – Criteria for Domestic Wastewater Treatment Facility Classes A, B, C, and D

Description of the Facility	Plant Design Flow (in MGD)				
	Below 0.5	<u>0.5-1.00</u>	<u>1.01-2.00</u>	2.01-4.00	Above 4.00
(a) Waste stabilization ponds, including aerated and non-aerated types	D	С	С	В	В
(b) Trickling filter or rotating biological contactor	С	С	В	В	A
(c) Extended aeration process sequencing batch reactors (SBR)	С	В	В	В	A

designed to operate in the extended aeration loading range.					
(d) All other activated sludge processes and extended aeration where used beyond secondary treatment (i.e., nitrification) and chemical and/or physical processes providing a high degree of treatment other than polishing ponds.	В	В	В	В	A
(e) Recirculating sand filtration	D	С	С	С	С
(f) Wetlands used as a part of the water treatment process	Will be classified in alignment with the last treatment process prior to release of the effluent into the wetland for further treatment.				

- 100.53 The classification of any domestic wastewater treatment facility may be changed at the discretion of the Division by reason of based on changes in any condition or circumstance on which since the last classification was predicated determination.
- 100.5.4 Any domestic wastewater treatment facility that utilizes a combination of two or more of the treatment processes described in section 100.5.2 of this regulation shall be classified in accordance with the highest level of treatment process utilized.

#### 100.6 INDUSTRIAL WASTEWATER TREATMENT FACILITY CLASSIFICATION

#### 100.6.1 Classification

- (a) Industrial wastewater treatment facilities shall be classified as Class 1 or Class 2 facilities. Class 2 facilities shall be exempt from the requirement to operate under the supervision of a certified operator in responsible charge. Facilities not classified as Class 2 facilities shall be classified as Class 1 facilities.
- (b) Class 2 Facilities
  - (i) Class 2 facilities shall include facilities:
- (c) Class 1 Industrial Wastewater Treatment Facilities.
- 100.6.1 Class 1 industrial wastewater treatment facilities shall be further classified in accordance with the following four classes: Class D, Class C, Class B, or Class A. Class A is the highest level of classification and Class D is the lowest level of classification. The Division may make changes in classification in accordance with the needs created by particular complexities of any specific industrial wastewater treatment facility based on consideration of facility specific factors, including, but not limited to:
  - (a) design features or other characteristics that make the plant more difficult to operate;
  - (b) treatment of a waste that is unusually difficult to process adequately;

- (c) flow conditions, use classifications and/or water quality standards assigned to the waters receiving the treated effluent requiring an unusually high degree of plant operation control in order to meet permit conditions; or
- (d) any combination of the above conditions or circumstances.

100.6.2 Table – Criteria for Industrial Wastewater Treatment Facility Classes A, B, C, and D (under the "Class 1" Category)

CLASSIFICATION	TREATMENT PROCESS <sup>1</sup>
Class A	Chemical conversion (e.g., cyanide destruction, hexavalent chromium reduction); lon exchange; Electrolytic conversion; Filtration by reverse osmosis.
Class B	Chemical coagulation and flocculation; Adsorptive processes (e.g., activated carbon); Ultrafiltration; Microfiltration; Chemical precipitation; Suspended, fixed, or a combination of biological processes (e.g., activated sludge, trickling filters, rotating biological contactors).
Class C	Standard clarification (including waste ponds for settling that regularly utilize chemical addition); Filtration (e.g., mixed media, pressure); Neutralization; Solids Dewatering (e.g., sand or surfaced drying beds, mechanical); Airstripping; Sludge Digestion.
Class D	Particulate settling ponds; Simple gravity flow filtration without chemical addition; Physical water/gas separation without chemical addition; Cooling water discharge without chemical addition.

<sup>&</sup>lt;sup>1</sup> Treatment processes are listed as examples and are not all inclusive.

- 100.6.3 The classification of any Class 1 industrial wastewater treatment facility may be changed at the discretion of the Division by reason of based on changes in any condition or circumstances on which since the last classification was predicated determination.
- 100.6.4 Any Class 1 industrial wastewater treatment facility that regularly utilizes a combination of two or more of the treatment processes described in section 100.6.2 of this regulation shall be classified in accordance with the highest level of treatment process utilized.
- 100.6.5 Industrial wastewater treatment facilities that meet the automatic exemption criteria in section 100.1.5(a) are exempt from the requirement to operate under the supervision of a certified operator in responsible charge and shall not be classified.

100.6.1(b)(ii)If at any time the facility does not meet the conditions of section 100.6.1(b)(i), the facility must notify the Division, in writing, and begin operating under the supervision of a certified operator in responsible charge within 30 days of the change in operations.

#### 100.7 WATER DISTRIBUTION SYSTEM CLASSIFICATION

- 100.7.1 Water distribution systems shall be classified in accordance with the following four classes: Class 1, Class 2, Class 3 or Class 4. Class 4 is the highest level of classification and Class 1 is the lowest level of classification. The Division may make changes in classification in accordance with the needs created by particular complexities of any specific water distribution system based on consideration of system specific factors, including, but not limited to:
  - (a) unusual factors affecting the complexity of transmission, mixing of sources, or potential public health hazards;
  - (b) size and/or length of the system's water mains;
  - (c) whether or not there are automatic control valves, including but not limited to, pressure reducing or altitude valves;
  - (d) number and/or size and/or types of meters;
  - (e) existence of storage tanks in the system;
  - (f) existence of multiple pressure zones;
  - (g) maximum pressure in the system;
  - (h) existence of booster stations;
  - (i) number of service connections; or
  - (j) quantity of water distributed.
- 100.7.2 Table Criteria for Water Distribution System Classes 1, 2, 3, and 4

<u>CLASS</u>	POPULATION SERVED
Class 1	3,300 or Less
Class 2	3,301 - 25,000
Class 3	25,001 – 100,000
Class 4	Over 100,000

100.7.3 The classification of any water distribution system may be changed at the discretion of the Division by reason of based on changes in any condition or circumstances on which since the last classification was predicated determination.

- 100.7.4 Water distribution systems that meet the exemption criteria in section 100.1.5(a) are exempt from the requirement to operate under the supervision of a certified operator in responsible charge and are not "public water systems" subject to the Colorado Primary Drinking Water Regulations, 5 CCR 1002-11, shall be exempt from the requirement to operate under the supervision of a certified operator in responsible charge, and thus shall not be classified.
- 100.7.5 An entire distribution system that falls within the jurisdiction of the *Water Well Construction and Pump Installation Contractors Act*, C.R.S. 37-91-101, et seq., shall be exempt from the requirement to operate under the supervision of a certified operator in responsible charge, and thus shall not be classified.

#### 100.8 WASTEWATER COLLECTION SYSTEM CLASSIFICATION

- 100.8.1 Wastewater collection systems shall be classified in accordance with the following four classes: Class 1, Class 2, Class 3 or Class 4. Class 4 is the highest level of classification and Class 1 is the lowest level of classification. The Division may make changes in classification in accordance with the needs created by particular complexities of any specific wastewater collection system based on consideration of facility specific factors, including, but not limited to:
  - (a) any unusual factors affecting the complexity of collection;
  - (b) whether there is the potential for mixing of sources; or
  - (c) the presence of any potential public health hazards.

100.8.2 Table - Criteria for Wastewater Collection System Classes 1, 2, 3, and 4

CLASS	POPULATION SERVED
Class 1	3,300 or Less
Class 2	3,301 - 25,000
Class 3	25,001 – 100,000
Class 4	Over 100,000

100.8.3 The classification of any wastewater collection system may be changed at the discretion of the Division for based on changes in any condition or circumstances on which since the last classification was predicated determination.

### 100.189 RESPONSIBILITIES AND DUTIES OF WATER AND WASTEWATER FACILITY OWNERS

- 100.918.1 Supervision by a Certified Operator in Responsible Charge
  - (a) No owner of a water or wastewater facility shall allow the facility to be operated without the direct supervision of one or more certified operators in responsible charge.

"Direct supervision" means that the certified operators in responsible charge have supervisory responsibility and authority with respect to the operation of the water or wastewater facility and for the activities and functions of other facility operators.

- (b) The owner designates the certified operators in responsible charge of the water or wastewater facility by completing and submitting the appropriate division contact update form.
- (c) Owners shall ensure that their agreements with the certified operators in responsible charge are sufficiently detailed and formal to reflect all the duties as outlined in section 100.4611.
- (d) Contracts for limited services do not fulfill the owner's obligation, under section 100.189.1(a), to place the facility under the supervision of one or more certified operators in responsible charge. Contracts for limited services, such as compliance sampling, do not rise to the level of a contract for a certified operator in responsible charge.

#### 100.918.2 Decisions Reserved to Certified Operator in Responsible Charge

Each owner of a water or wastewater facility shall ensure that all process control and/or facility integrity decisions about water quality or quantity or wastewater effluent quality or quantity that may affect public health or the environment are made by either a certified operator in responsible charge or by another operator certified at a level equal to or above the classification of the facility he or she is operating in accordance with the facility's written operating plan as described in section 100.4611.6.

#### 100.918.3 Availability of Certified Operator in Responsible Charge

Each owner of a water or wastewater facility shall ensure that a certified operator in responsible charge is available or ensure that operations are conducted in accordance with the facility's written operating plan as described in section 100.4611.6 whenever the facility is in operation.

Available" means either on-site or able to be contacted as needed to make decisions and to initiate appropriate actions in a timely manner.

#### 100.918.4 Reporting Requirement

Each owner of a water or wastewater facility shall submit the appropriate division contact update form, no later than thirty (30) days following the date the facility is initially placed on-line and thereafter, no later than thirty (30) days after changes to any of the following information:

- name, mailing address, phone number, and email address (if available) of the facility legal representative providing the information;
- (b) full legal name and operator identification number of the certified operators in responsible charge;
- (c) identification of the facility or facilities for which each certified operator in responsible charge has responsibility; or

(d) the Public Water System Identification (PWSID) number, the Colorado Discharge Permit System (CDPS) permit number, or general permit certification number for all facilities listed.

#### 100.489.5 Certified Operator in Responsible Charge Certification Requirements

- (a) Each water and wastewater facility shall have at least one certified operator in responsible charge certified as shown in the following table:
- (b) Table Criteria for Certified Operator in Responsible Charge

Facility or System Classification	Certified Operator in Responsible Charge Minimum Required Certification Levels
<u>W</u> :	ater <del>Systems</del> Facilities
Water Treatment	
A	А
В	A or B
С	A, B, or C
D	A, B, C, D, S <sup>1</sup> or T <sup>2</sup>
Water Distribution	
4	4
3	4 or 3
2	4, 3 or 2
1	4, 3, 2, 1, or S <sup>1</sup>
Domestic \	Wastewater Systems Facilities
Wastewater Treatment	
A	А
В	A or B
C	A, B, or C
D	A, B, C, D, or S <sup>3</sup>
Wastewater Collection	., _, _, _, _,
4	4

3	4 or 3
•	1 01 0
2	4, 3 or 2
	•
1	4, 3, 2, 1, or S <sup>3</sup>
Industrial \	Vastewater <del>Systems</del> Facilities
industrial v	vastewater <del>Systems</del> raciiities
Λ.	Λ.
A	A
В	A or D
D	A or B
C	A, B, or C
	۸, D, U C
	2
l D	A, B, C, or D, or S <sup>3</sup>
	, , , , , , , , , , ,

Applicable only in accordance with section 100.489.5(d)

- (c) Class T certificate is only valid for operating facilities that meet all of the following criteria:
  - (i) are classified as transient non-community public water systems;
  - (ii) that draw water from ground water sources not under the direct influence of surface water;
  - (iii) serve fewer than 100 individuals per day;
  - (iv) utilize treatment consisting only of non-gaseous chlorine disinfection; and
  - (v) would be classified as a Class "D" water treatment facility and or as a Class "1" water distribution system under the provisions of this regulation.
- (d) Class S Water certificate is only valid for operating facilities that meet all of the following criteria:
  - (i) serve no more than 3,300 persons; and
  - (ii) would be classified as a Class "D" water treatment facility and or as a Class "1" water distribution system under the provisions of this regulation.
- (e) Class S Wastewater certificate is only valid for operating facilities that meet all of the following criteria:
  - (i) serve no more than 3,300 persons; and
  - (ii) would be classified as a Class "D" wastewater treatment facility and <a href="mailto:organics.org">organics.organic

Applicable only in accordance with section 100.489.5(c)

Applicable only in accordance with section 100.489.5(e)

- 100.489.6 The Division shall investigate any instances of possible violations of the requirements of sections 100.48-9.1 100.9.5 of this regulation by any owner of a water or wastewater facility. The Division shall enforce compliance with these requirements in accordance with the procedures in sections 25-9-110(3), (4), and (6), C.R.S.
- 100.9.7 Any water or wastewater facility owner who seeks a hearing in response to a Division finding of a violation under sections 100.489.1 100.9.5 or a Department assessment of a civil penalty for such violation may request a hearing in accordance with section 24-4-105, C.R.S., before the Board by submitting to the Division, within thirty (30) days of notice of such finding or assessment, a request containing the following:
  - (a) identification of the person(s) requesting the hearing and the subject matter of the request;
  - (b) the statutory and/or regulatory authority and factual basis for the request; and
  - (c) the relief requested.

#### 100.4510 RESPONSIBILITIES AND DUTIES OF A CERTIFIED OPERATOR DUTIES

- 100.\_<u>1510</u>.1 In the performance of their duties, certified operators shall exercise a level of reasonable care and judgment consistent with the experience and training appropriate to their level of certification as defined in these regulations.
- 100.4510.2 Certified operators shall protect the public health and the environment by properly performing and/or supervising the activities pertinent to controlling the operation of a water or wastewater facility in accordance with a written operating plan as described in section 100.116.6 as appropriate to their level of certification, including but not limited to the following:
  - (a) controlling the selection of or flow from a source to a water or wastewater facility and controlling the selection of or flow from a water or wastewater facility to a receiving body or system;
  - (b) controlling the processing of raw and/or treated and/or finished water/wastewater;
  - (c) preparing and/or controlling chemical addition for water or wastewater treatment;
  - (d) observing and taking necessary actions in response to variations in operating conditions;
  - (e) interpreting meter and/or gauge readings and adjusting facility processes based on such interpretations;
  - (f) controlling the operation and maintenance of valves and/or gates;
  - (g) controlling the operation and maintenance of pumps;
  - (h) maintaining logs and/or records;
  - (i) collecting and/or analyzing process control samples; and

- (j) reporting instances of non-compliance or situations that could result in non-compliance to the certified operator in responsible charge.
- 100.4510.3 When acting in the capacity of a certified operator, certified operators shall refrain from behaving in a threatening, intimidating, demeaning or similar manner in verbal or written communications or in interactions with the public, the regulated community and regulators.
- 100.13.610.4 Certified operators shall update the Board or its contractor designee with any changes to mailing address, telephone number, or email within 30 days of such change.

### 100.1611 RESPONSIBILITIES AND DUTIES OF A CERTIFIED OPERATOR IN RESPONSIBLE CHARGE DUTIES

- 100.4611.1 Certified operators in responsible charge are designated by the owner of the water or wastewater facility and have supervisory responsibility for the operation of the facility and for the operational activities and functions of other facility operators.
- 100.4611.2 Process control and/or system integrity decisions with respect to drinking water quality or quantity that may affect the public health or the environment are reserved to certified operators in responsible charge.
- 100.4611.3 Process control and/or facility integrity decisions with respect to effluent quality or quantity that may affect the public health or the environment are reserved to certified operators in responsible charge.
- 100.16.4 Certified operator(s) in responsible charge of a water or wastewater facility must hold a valid certificate equal to or greater than the classification of the water or wastewater facility they operate.
- 100.4611.4 Certified operators in responsible charge of a water or wastewater facility must hold a valid certificate equal to or greater than the classification of the water or wastewater facility they operate.
- 100.4611.5 Certified operators in responsible charge shall protect the public health and the environment in the conduct of their duties. The certified operators in responsible charge are accountable for the operation and maintenance of the water or wastewater facility and are responsible for understanding the requirements of the applicable permits, laws and regulations. These duties include the following:
  - (a) controlling, supervising or actively participating in the planning, operation and maintenance of a water or wastewater facility;
  - (b) making process control and system integrity decisions on the operation and maintenance of the water or wastewater facility;
  - (c) making decisions and initiating actions regarding the operation of the water or wastewater facility in a timely manner;
  - (d) inspecting and testing new, modified, or repaired facilities prior to placing or returning such facilities into service;
  - (e) developing maintenance programs;

- (f) developing and maintaining the written operating plan as described in section 100.4611.6;
- (g) reporting instances of non-compliance or situations that could result in non-compliance as appropriate to facility owners and the Department; and
- (h) performing other functions of direct responsibility, including those enumerated in section 100.<del>1510</del>.
- 100.<u>1611</u>.6 <u>Written Operating Plan Certified operators in responsible charge of a water or wastewater facility may delegate tasks or activities, including those listed in section 100.10, to other facility operators when delineated by a written operating plan.</u>
  - (a) Such tasks may be performed by the facility operators even if the certified operator in responsible charge is not on-site.
  - (b) The operating plan must be precise in defining the limits of such tasks or activities.
    - (i) The operating plan must be reviewed and updated, as needed, at least once each calendar year by a certified operator in responsible charge.
    - (ii) The operating plan must be available to the facility owner and other facility operators at all times. The operating plan must be available for inspection by the Department upon request.
  - (c) Any operational activity beyond the limits defined in the operating plan requires the immediate and direct consultation with and participation of a certified operator in responsible charge or another operator holding a certificate equal to or above the classification of the facility he or she is operating.
  - (d) Certified operators in responsible charge remain accountable for the consequences of the performance of such tasks<u>or activities</u> by other facility operators under their charge.

#### 100.20.12 DISCIPLINARY PROCEEDINGS

- 100.20.312.1 The Division shall investigate any instances of possible misconduct by certified operators or certified operators in responsible charge. The Division shall present the results of the investigation and its recommendations for any disciplinary action, including reprimand or suspension or revocation of a certificate, to the Board in accordance with section 24-4-104, C.R.S.
- 100.20.112.2 Certified Operators In accordance with the procedures in sections 24-4-104 and 105, C.R.S., tThe Board may reprimand a certified operator, and/or suspend or revoke the certificate of any certified operator who violates the requirements of this regulation, including, but not limited to the following:
  - failing to exercise reasonable care and judgment consistent with the operator's level of certification and degree of responsibility for the operation of a water or wastewater facility;

- (b) failing to properly perform and/or supervise activities pertinent to controlling the operation of a water or wastewater facility, including, but not limited to the tasks described in section 100.45-10 of this regulation;
- (c) willfully or negligently violating, causing, or allowing the violation of this regulation, 5 CCR 1003-2; the *Colorado Primary Drinking Water Regulations*, 5 CCR 1002-11; the *Colorado Discharge Permit System Regulations*, 5 CCR 1002-61, or a discharge permit issued thereunder; or any other relevant regulations;
- (d) submitting false or misleading information on any document provided to the Department, Division, Board, or contractor designee of the Board;
- (e) using fraud or deception in the course of employment as a certified operator;
- (f) failing to conform with minimum standards of performance of a certified operator's duty;
- (g) engaging in dishonest conduct during an examination;
- (h) obtaining a certificate through fraud, deceit, or the submission of materially inaccurate application information;
- representing oneself as holding a valid operator's certificate after the expiration, suspension, or revocation of the certificate; or
- (j) when acting in the capacity of a certified operator, behaving in a threatening, intimidating, demeaning or similar manner in verbal or written communications or in interactions with the public, the regulated community or regulators.
- 100.20.2 12.3 Certified Operators in Responsible Charge In accordance with the procedures in sections 24-4-104 and 105, C.R.S., The the Board may reprimand a certified operator in responsible charge, and/or suspend or revoke the certificate of any certified operator in responsible charge, who:
  - (a) fails to meet the requirements of a certified operator in responsible charge as defined in section 100.<del>16-11of this regulation</del>; and/or
  - (b) willfully or negligently causes, instructs, or allows any other person or operator under his or her charge, direction, or supervision to act in a manner inconsistent with a certified operator's duties and obligations as described in section 100.45

    10 or other relevant parts of this regulation, or to act in a manner inconsistent with the Colorado Primary Drinking Water Regulations, 5 CCR 1002-11; the Colorado Discharge Permit System Regulation, 5 CCR 1002-61; or a discharge permit issued thereunder; or any other relevant regulations or permits.
- 100.20.3 The Division shall investigate any instances of possible misconduct by certified operators or certified operators in responsible charge. The Division shall present the results of the investigation and its recommendations for any disciplinary action, including reprimand or suspension or revocation of a certificate, to the Board in accordance with section 24-4-104, C.R.S.

100.20.4 100.12.4 Reprimand

A reprimand is an official admonition for wrongdoing issued to a certified operator by the Board in the form of a letter, which includes the facts and circumstances leading to the reprimand, the statutory and regulatory provisions at-issue, and a warning of more serious consequences for future wrongdoings.

#### 100.20.5 100.12.5 Suspension

- (a) The Board may suspend a certificate for a period not to exceed three (3) years.
- (b) At the end of the suspension period, an operator may resume prior duties without being required to submit a new application for certification.
- (c) If an operator's certificate is due for renewal during the period of suspension, the operator shall remain subject to the renewal deadline and shall renew the certificate in a timely manner.
- (d) Certificates renewed during a suspension period shall become valid for a period of three (3) years, effective on the ending date of the suspension period.

#### 100.20.6 100.12.6 Revocation

- (a) Following the revocation of a certificate, an operator may not apply for another certificate in the same classification category as that of the revoked certificate for a period of three (3) years.
- (b) <a href="mailto:any-Any-operator">any-Any-operator</a> whose certificate is revoked shall be treated as a new applicant for purposes of this regulation and must meet all the initial certification requirements, including passing the appropriate certification examination.

#### 100.20.7 100.12.7 Emergency Suspension or Revocation

The Division may immediately suspend or revoke certificates where such immediate action is necessary to protect the public health or the environment.

400.20.8 100.12.8 Following the suspension or revocation of his or her certificate, an operator shall not represent that he or she holds a certificate in the classification category for which the certificate was suspended or revoked. No person shall operate a water or wastewater facility in reliancewith on a suspended or revoked certificate.

### 100.<del>10</del>13 APPLICATION TO SIT FOR CERTIFICATION EXAMINATION, QUALIFICATIONS, EDUCATION, EXPERIENCE AND SUBSTITUTIONS

- 100.101.1 A person desiring to be certified to operate a water or wastewater facility shall first file an application to sit for examination with the Board or its contractordesignee.
- 100.<del>10</del>13.2 The Board shall designate the number of examination cycles during each calendar year.
- 100.<del>1013</del>.3 For each examination cycle, the Board or its <u>contractor</u>designee shall specify an application deadline.
- 100.1013.4 All applications for certification examinations shall be made on forms provided by the Board or its contractordesignee.

- 100.1013.5 Completed application materials and fees must be received by the Board or its contractordesignee on or before the application deadline for each examination cycle.
- 100.4013.6 While an applicant may apply for more than one examination during a cycle, that applicant may apply for only one level of certification for each certification category (water treatment facility, domestic or industrial wastewater treatment facility, distribution system or collection system).
- 100.4013.7 The applicant must specify examination category (i.e. water, domestic or industrial wastewater, distribution, collection, Class S water system, I Class S wastewater, or Class T), level of certification sought, examination date, and testing location and may only take the specified examination once during each examination cycle.
- 100.4013.8 The Board or its designee contractor shall review applications and supporting documents, determine the eligibility of applicants to sit for the examination, and notify the applicants of their status. Any application disapproval notification shall specify the reason(s) the application does not meet the minimum requirements.
- 100.4013.9 If an application is disapproved, the applicant may request a re-review of the application, including consideration of any clarifying information that the applicant may choose to submit regarding the identified basis for disapproval.
  - (a) Any such request for re-review must be received by the Board or its designee contractor within two weeks of the date of the disapproval notification letter.
  - (b) All additional factual information supporting the application must be received with the re-review request.
- 100.4013.10 If an application is disapproved after re-review by the Board's contractor, the applicant may appeal this decision termination to the Board in accordance with the procedures in section 24-4-105, C.R.S.
  - (a) Any such appeal must be received in the Board's office within two weeks of the date of the second disapproval notification letter.
  - (b) No new factual information will be accepted during the Board appeal process, except for good cause shown.

#### 100.9100.13.11 Qualifications for Certification Of Operators

#### 100.9.1 Continuity of Certification

- (a) Operators certified under the system of classification and certification in place prior to January 30, 2001, including distribution and collection system operators who passed the voluntary examination administered by the Colorado Water Distribution and Wastewater Collection Certification Council, shall be deemed compliant with this provision and fully capable of operating facilities as described herein.
- (b) Operators holding Class 3 water distribution or wastewater collection certifications issued prior to January 1, 2008 shall be deemed to have met the requirements for the Class 4 certification and shall be issued Class 4 certifications.
- 100.9.2(a) Basic Requirements for Certification by Examination

- (ai) Applicants shall be evaluated by the Board or its designee contractor as to education, experience, and knowledge related to the classification level for which the applicant seeks to be certified.
- (bij) An applicant must pass a validated examination designated for the category and level of facility for which application is being made with a minimum passing score of 70 percent.
- (eiii) To qualify to sit for an examination, an applicant must meet the minimum education requirements, the minimum experience or cross-experience requirements, and the prior certification requirements as set forth in section 100.9.813.11(g).
- 400.9.3(b) Minimum Educational Requirements for Certification by Examination
  - (ai) Applicants must have a high school diploma or a general equivalency diploma (GED), except as provided in section 100.9.3(c)13.11(b)(iii).
  - (bij) Experience and relevant training may substitute for a high school diploma or GED. Applicants substituting experience and relevant training for the high school diploma or GED shall:
    - (iA) have an additional six (6) months of qualifying experience; and
    - (#B) demonstrate the completion of 1.0 training units in a course approved as a substitute for entry-level experience requirements.
  - (eiii) Applicants for certification as Class D, Class 1, Class S, or Class T operators of water or wastewater facilities who are enrolled in the last semester of Board approved courses or programs which are specifically designed to prepare secondary students to operate water or wastewater facilities may be approved to take the examination before earning a high school diploma.
    - (iA) Such an approval shall be based on a case-by-case determination that such courses or programs are directly and specifically relevant to the operation of water and wastewater facilities.
    - (iiB) After passing the examination, the certificate will be issued upon submitting proof of the high school diploma to the Board or its designeecontractor.
- 100.9.4(c) Experience Determinations for Certification by Examination
  - (ai) No more than one year of experience will be credited for employment/activities during any one calendar year.
  - (bii) For water or wastewater facilities that require less than a full time operator for proper operation, the experience of an operator of such a facility who works less than half time will be counted as half-time experience; the experience of an operator of such a facility who works half-time or more will be counted as full-time experience.

- (eiii) The aggregate time spent operating multiple facilities shall be considered in any determination of whether to credit full-time experience or half-time experience.
- (div) Experience obtained in the operation of a seasonal water or wastewater facility will be credited only for that portion of the year during which the facility is in operation.
- (ev) Except as described in section 100.9.913.11(h) below, the certification examination application deadline is the experience cut-off date in determining whether an operator has the required experience to take a certification examination at a particular level.
- (fvi) To meet the experience requirement to test for a particular level of certification, the experience relied upon does not have to be at the level of the examination for which application is being made.
- 400.9.5(d) Evaluation of Experience. For purposes of this section, domestic and industrial wastewater treatment facility experience shall be considered interchangeable. In evaluating experience of operators the Board or its designed contractor will be guided by:
  - whether and to what degree the experience required technical knowledge of the operation of a water or wastewater facility;
  - (bij) whether and to what degree the experience was actual on-site operating experience with the daily operational aspects of a facility that could affect water quality or quantity; and
  - (eiii) whether or not the experience included the responsible charge of a water or wastewater facility.
- 400.9.6(e) Once specific experience or relevant training is credited toward the satisfaction of either the experience or education requirements of this section, that same experience and/or training may not be further credited to meet other requirements of this section.
- 400.9.7(f) Prior Certification Requirements. To qualify to sit for an examination, an applicant must hold a certificate for the same certification category (water treatment facility, domestic or industrial wastewater treatment facility, distribution system or collection system) and in the class immediately below the class for which application is being made. Prior certification requirements are shown in the table below.

Table - Prior Certification and Experience Requirements

Certification Class	Prior Certification Required <sup>1</sup>	Minimum Experience Required
Class T	None	No minimum experience requirement
Class S, Class D, or Class 1	None	1 Month

Class C	Class D or Class S	2 Years
Class 2	Class 1 or Class S	2 Years
Class B	Class C	3 Years
Class 3	Class 2	3 Years
Class A	Class B	4 Years
Class 4	Class 3	4 Years

<sup>&</sup>lt;sup>1</sup> Prior certification must be for the same certification category as that of the examination being applied for.

100.9.9(h) Special Rules for Satisfying the Minimum Experience Requirements for Class D, Class 1, Class S and Class T Certifications:

- (ai) Applicants for certification as Class D, Class 1, Class S, or Class T operators of water or wastewater facilities may be approved to take the examination before accruing the necessary experience for the issuance of a certificate.
- (bij) After passing the examination, the certificate will be issued upon showing completion of satisfactory experience to the Board or its designeecontractor.
- (eiii) The required experience may be obtained either under the supervision of a certified operator in responsible charge or through the successful completion of an approved training course or course of study.
- (div) Any education courses used to satisfy the basic experience requirement for a Class D, Class 1, Class S, or Class T certificate may not be used to satisfy the certificate renewal requirements for that same certification.

### 100.<u>13.</u>12 <u>Substituting education and cross experience substituted for the experience requirements</u>

#### 100.12.1(a) Substitution Substituting Education for Experience Requirements

- (ai) Post-secondary education may also be substituted for the experience requirements of section 100.9-13.11(c) based on the basis of successful completion of formal academic credit hours, as approved by the Board or its contractordesignee in accordance with section 100.13.12(b), for all or a portion of an academic year. For education substitution for experience, academic credit hours shall be calculated as follows:
  - (iA) 15 semester hours = ½ academic year = 6 months experience; 15 quarter hours = 1/3 academic year = 4 months experience;
  - (iiB) Training units: 300 contact hours or 30 training units = 15 quarter hours = 4 months experience;

- thirty (30) semester hours and/or forty-five (45) quarter hours shall constitute one (1) year's formal education and may be substituted for one (1) year of experience.
- (bii) Consideration of Field(s) of Study
  - (iA) Credit for up to fifty percent (50%) of the applicable experience requirement of section 100.9-13.11 may be granted for satisfactorily completing structured programs of study in a degree or certificate granting educational institution or equivalent for technically oriented programs which the Board or its designee contractor has determined are directly relevant to the operation of water and wastewater facilities, including but not limited to post high school education in the environmental control field, engineering or related science. Experience credit shall be granted based upon the number of academic years required to complete the program, in accordance with subsection 100.12.113.12(a).
  - (iiB) Credit for up to twenty-five (25%) of the applicable experience requirement of section 100.9-13.11 may be granted for satisfactorily completing structured programs of study in a degree granting educational institution or equivalent, regardless of field of study. Experience credit shall be granted based upon the number of academic years required to complete the program, in accordance with subsection 100.42.413.12(a).
- (eiii) In instances where an approved degree or certificate program has not been completed, credit for up to fifty percent (50%) of the applicable experience requirement of section 100.9-13.11 may be granted for the completion of individual technically oriented courses as approved by the Board or its contractordesignee as relevant to the operation of water and wastewater facilities, including but not limited to post high school education in the environmental control field, engineering or related science, in accordance with subsection 100.42.13.12(a).
- (div) At least fifty percent (50%) of any experience requirement of section 100.9-13.11 of this regulation shall be met by actual on-site operating experience in a water or wastewater facility, except that Class D, Class 1, and Class S applicants may satisfy the experience requirements exclusively with formal academic education credits or training units, in accordance with subsection 100.913.11(h).
- 100.12.2(b) Approval of Training, Educational Courses, and Institutions When Substituting Education for Experience
  - (ai) The Board or its designeecontractor may approve, for purposes of substituting education for experience, courses or programs which are specifically designed to prepare secondary students to operate water or wastewater facilities. Such an approval shall be based on a case-bycase determination that such courses or programs are directly and specifically relevant to the operation of water and wastewater facilities.
  - (bii) Approval of technically-oriented courses or programs, for purposes of substituting education for experience, shall be determined by the Board

or its <u>contractordesignee</u> based on a determination that such courses or programs are directly relevant to the operation of water and wastewater facilities. Such courses and programs may include, but are not limited to, post-secondary education in the environmental control field, engineering, microbiology, chemistry, or other related science.

- (eiii) Approval of educational institutions for purposes of substituting education for experience shall be determined by the Board or its designee contractor based on accreditation by recognized regional associations for such institutions in the United States. For educational institutions outside the United States, the applicant shall be required to establish to the satisfaction of the Board or its contractordesignee the equivalency and suitability of the courses of study claimed for credit.
- (div) Other educational programs, including but not limited to, specialized operator training courses, seminars, workshops, correspondence or computer courses, and technical conferences, may be credited toward education for purposes of substitution for experience as approved by the Board or its contractordesignee. Such programs will receive credit in training units on the following basis:
  - (iA) Ten (10) contact hours shall be required to equal one training unit. A contact hour means a classroom or supervised hour of attendance or hour of participation, recognized by the Board as a training unit, successfully completed by an applicant.
  - (iB) Three (3) training units shall equal one semester credit hour or two training units shall equal one quarter credit hour for purposes of equivalency.
- 400.12.3(c) Substitution of Cross-Experience for Experience Requirements
  - (ai) Cross-experience may be substituted for the experience requirements of section 100.9-13.11 for certification as a Class C, Class B, or Class A water treatment facility operator, domestic or industrial wastewater treatment facility operator; or for a Class 2, Class 3, or Class 4 water distribution or wastewater collection system operator, except that at least fifty percent (50%) of any experience requirement of section 100.9-13.11 shall be met by actual on-site operating experience in the specific certification category, water or wastewater, for which application is being made.
  - (bii) For the purpose of this section, "cross-experience" means that:
    - qualifying experience as an operator in a water treatment facility may be substituted for up to fifty percent (50%) of the experience requirement for certification as an operator of a wastewater treatment facility;
    - (iiB) qualifying experience as an operator in a wastewater treatment facility may be substituted for up to fifty percent (50%) of the experience requirement for certification as an operator of a water treatment facility;

- (iiiC) qualifying experience as an operator in a water distribution system may be substituted for up to fifty percent (50%) of the experience requirement for certification as an operator of a wastewater collection system; or
- (ivD) qualifying experience as an operator in a wastewater collection system may be substituted for up to fifty percent (50%) of the experience requirement for certification as an operator of a water distribution system.

#### 100.13.1113 Examinations

- -The Board or its <u>contractordesignee</u> shall oversee the preparation and administration of validated examinations to be used in determining whether or not the applicant has the necessary skills, knowledge, ability and judgment appropriate for the level of certification sought.
- 100.11.2(b) Examinations shall be held at places and times set by the Board or its contractordesignee. Advance announcements of the date and locations of examinations shall be made by the Board or its contractordesignee.
- -All examinations shall be written or administered electronically, except in such cases as the Board or its <u>contractor</u>designee decide, on a case-by-case basis, represent proper exceptions to this requirement.
- 100.11.4 (d) All examinations will be graded by the Board or its contractor designee, and the applicants shall be notified of the results.
- <u>100.11.5(e)</u> -Examinees shall be provided an analysis of their examination performance indicating the level of knowledge demonstrated for each topic tested.
- -Separate validated examinations will be prepared for each category and level of certification available. The appropriate range and balance of examination material shall be developed from formal job analyses and the need-to-know criteria resulting from such analyses.

#### 100.<del>1314</del> APPLICATION FOR NEW CERTIFICATES AND CERTIFICATES BY RECIPROCITY

100.14.1 The Board or its contractor designee shall award to the applicant a certificate designating the appropriate certification level upon satisfactory fulfillment of the requirements of section 100.13.114.3, 100.13.2 or 100.13.514.4, as appropriate, and payment of all applicable program fees listed in section 100.1916.2.

100.14.2 New operator certificates shall be valid for three (3) years from the date of the certification eligibility notification letter. Renewal Renewed certificates shall be valid for three (3) years from the date of expiration of the prior certificate, not from the issue date of the renewed certificate.

#### 100.13.114.3 Application for New Certificates

- (a) After receiving written notification of eligibility to apply for the certificate, the applicant must complete and submit the certificate application. Applicants must meet all certification requirements and shall submit the following, where applicable:
  - (i) verification of the experience requirements for Class D, Class 1, Class S and Class T certification pursuant to section 100.9.913.11(h);
  - (ii) a copy of a high school diploma pursuant to section 100.9.3(c)13.11(b);
  - (iii) a current mailing address, telephone number and email address (if available); and
  - (iv) verification of lawful presence in the United States in accordance with section 24-76.5-101 et.seq, C.R.S.
- (b) An applicant shall complete the certification process within three (3) years from the date of the certification eligibility notification letter.

#### 100.<del>13.5</del> 14.4 Application for Certificates by Reciprocity

- (ba) Operators must submit a written application for certification by reciprocity to the Board or its contractordesignee.
- (ab) Certificates may be issued by the Board or its <u>contractor</u>designee, without examination, on a case-by-case basis, to persons in a comparable classification who have met the following requirements:
  - (i) Passed an adequate, validated examination and who hold a valid certificate in another state, territory or possession of the United States, or other country as issued by one of these entities or, at the discretion of the Board, by another certifying entity, provided the requirements for certification of operators under which the person's certificate was issued do not conflict with the provisions of Article 9 of Title 25, C.R.S., and are of a standard not lower than that specified by these regulations.
  - (ii) Obtained qualifying experience in the state, territory or possession of the United States, or other country in which they hold a valid certificate.
- (c) After receiving written notification of approval by the Board for certification in Colorado, applicants shall follow the instructions provided in the approval letter to complete the certification process.
- (d) Certificates by reciprocity shall be considered "new" certificates subject to all requirements of sections 100.<del>13.114.3</del> and 100.<del>1916</del>.

## 100.14<u>15 PROFESSIONAL DEVELOPMENT - TRAINING UNIT REQUIREMENTS FOR RENEWAL OF CERTIFICATIONCERTIFICATE RENEWAL, EXPIRATION, REVOCATION AND TRAINING UNIT REQUIREMENTS</u>

#### 100.<del>13.2</del>15.1 Application for Renewal of Certificates

- (a) Certified operators must submit a <u>complete</u> written application for renewal to the Board or its <u>contractor</u>designee six to eight weeks prior to the expiration date of the certificate, in order to avoid expiration of a certificate under section 100.13.3.
- (b) Renewal applications must demonstrate that the certified operator satisfies the requirements of this regulation for renewal, including meeting the renewal training unit requirements stated in section 100.4415.5.
- (c) Renewal applications must include verification of lawful presence in the United States in accordance with sections 24-76.5-101 et.seq, C.R.S.
- (d) The Board or its <u>contractor</u>designee shall provide all application forms for renewal of certificates.
- (e) Renewal Process for Certified Operators Absent Due to Military Service
  - (i) "Military service" means service in the uniformed services, as defined in the Uniformed Services Employment and Reemployment Rights Act (USERRA), 38 U.S.C. §§ 4301-4335, as the performance of duty on a voluntary or involuntary basis in a uniformed service under competent authority and includes active duty, active duty for training, initial active duty for training, inactive duty training, full-time National Guard duty, a period for which a person is absent from a position of employment for the purpose of an examination to determine the fitness of the person to any such duty, and a period for which a person is absent from employment for the purpose of performing funeral honors duty as authorized by section 12503 of title 10 or section 115 of title 32.
  - (ii) During the period a certified operator is participating in military service, his or her certificate(s) shall be tolled relative to certification renewal and training unit requirements (i.e., for every day a certified operator is in military service, all certifications held by that operator will be put on hold for purposes of meeting the renewal and training unit deadlines). In addition to the number of days in service, an extra 90-day grace period shall be afforded to certified operators upon return from military service for purposes of meeting renewal and training unit deadlines. The Board or its contractordesignee shall have the discretion to extend this grace period to address extenuating circumstances on a case-by-case basis.
  - (iii) If the two-year renewal window for any certificate expires while a certified operator is in military service, the operator's certificate(s) will not become invalid during the period the operator is in service. Upon return from military service, the certified operator will have the amount of time accrued while in military service, plus an additional 90 days to obtain the required training unit credits and to submit a renewal application. The operator's certificate(s) will remain valid during that extended time period. In no case will the certified operator be subject to any late fees at the time of submitting a renewal application that is in conformance with section 100.13.215.1(e).

(iv) It is the certified operator's responsibility to alert the Board or its <a href="contractordesignee">contractordesignee</a> of intervening military service at the time of filing a renewal application. Such notification shall include the dates the operator was in "service in the uniformed services" in accordance with the USERRA definition. Certified operators shall be expected to provide a signature swearing under the penalty of perjury to the veracity of all statements regarding military service.

#### 100.13.3 15.2 Expired Certificates

- (a) A certificate becomes invalid on its expiration date.
- (b) Following expiration of a certificate, the operator shall not represent that he or she holds a certificate in the class for which the certificate expired.
- (c) No <u>certified</u> operator<u>in responsible charge</u> of a water or wastewater facility shall operate a facility <u>in reliance on with</u> an expired certificate.

#### (d) 100.15.3 Restoration of Expired Certificates

- (a) An operator may apply for renewal for two years following expiration of the certificate. The Board or its <u>contractordesignee</u> will renew the certificate if the operator pays the renewal and applicable late fees, as listed in section 100.<del>1916</del>.2<del>(d)</del>, and satisfies all applicable renewal requirements.
- (eb) Certificates which are renewed after their expiration date shall be valid for three years from the date of expiration of the prior certificate, not from the issue date of renewed certificate.

#### 100.4315.4\_Revocation of Non-Renewed Certificates

- (a) Any certificate not renewed by the operator within two years of its expiration is automatically revoked.
- (b) Any operator whose certificate is revoked shall be treated as a new applicant for purposes of this regulation and must meet all the initial certification requirements, including passing the appropriate certification examination.

#### 100.<del>14.1</del>\_15.5 Training Units

- In addition to the other requirements of this regulation, all certified operators must earn the appropriate number of training units, as specified in this section 100.15.5, before the operator's certificate will be renewed.
- (ab) At least fifty percent (50%) of the training units for certificate renewal must be for courses approved for credit in the specific field of the certificate being renewed.
- (bc) Up to fifty percent (50%) of the training units for certificate renewal may come from courses approved for credit in a field other than that of the certificate being renewed, including supplemental training courses.
- (ed) The maximum number of training units from a specific course that may be credited toward the renewal of a single certificate is the training unit equivalent of the actual number of approved hours in the course.

- (de) If applicable, the training units from one course may be applied toward the renewal of more than one certificate.
- (f) Training units may only be used once in each category to renew a certificate.
- (g) Training units are earned during the three-year period a certificate is valid.

  Training units may not carry over from one three-year period to the next.
- (h) For training that occurs over multiple dates, the training units will be considered to have been obtained on the date of completion of the training course or class.
- (i) If an operator takes a training course prior to taking a certification examination, passes the examination, and obtains a certificate at a new level, the training course completed prior to the examination will not count toward training units for renewal of the new certificate. Should a certified operator complete such a training course and not pass a new certification examination, that training course can be used, if applicable, to meet the training unit requirements for renewal of the operator's current certificate.

#### (i) Late renewal

- (i) Training classes taken after the expiration date of a certificate, but before the automatic revocation date, may be used to renew the expired certificate.
- (ii) If an operator completes training units after the expiration date of a certificate, but before the certificate is renewed and does not use the training units to renew the previous certificate, the training units may be used for the subsequent renewal.
- (iii) It is the certified operator's responsibility to keep track of when the training unit credits have been used and will be responsible to verify and affirm on the renewal application that he or she is not using the credits more than once.
- (iv) In the event that a certified operator uses training credits more than once, that could be grounds for disciplinary action, including revocation of a certificate.

#### 100.14.215.6 Table – Training Unit Requirements for Operator Certificate Renewal

Certified Operator Class	Training Unit Requirement
Class T	1.2 Training Units
Class D or Class 1	1.2 Training Units
Class S	1.8 Training Units
Class C or Class 2	1.8 Training Units
Class B or	2.4 Training Units

Class 3	
Class A or Class 4	3.0 Training Units

- 100.14.315.7 All training unit subject matter for which training units will be granted must be determined by the Board or its designee contractor to be relevant and necessary to the successful operation of a water or wastewater facility.
  - (a) The Board or its <u>contractordesignee</u> shall approve as "core training" courses with topics that are directly applicable to aspects of water and wastewater facility operations that may affect public health or the environment, or the need to maintain compliance with established requirements. Training units from such courses may be used to satisfy the training units requirements for the renewal of an operator's certificate in accordance with sections 100.14.15.5 and 100.15.6.
  - (b) Eligible "core training" topics may include the following subjects:
    - (i) operation and maintenance of facility mechanical systems, electrical equipment or hydraulics;
    - (ii) physical treatment, chemical treatment, biological treatment;
    - (iii) physical testing, chemical testing, biological testing, or disinfection;
    - (iv) regulatory compliance; or
    - (v) other relevant topics approved by the Board or its <u>contractor</u>designee.
  - (c) The Board or its <u>contractordesignee</u> may approve as "supplemental training" any courses that are found to provide useful operator knowledge but are not directly related to water or wastewater facility operations. Training units from courses approved as "supplemental training" may be used to satisfy the training unit requirements for renewal of an operator's certificate in accordance with sections 100.14.115.5 and 100.15.6.
- 100.14.4-15.8 Training units shall be awarded to certified operators for teaching a classroom course that has been approved by the Board or its <a href="contractor\_designee">contractor\_designee</a>. The training units awarded shall be double the training units approved for the course. If a course is given multiple times in a given year under a single course approval number, double training units will be given the first time the course is taught, and no additional training units will be granted for repeat presentations of the same course with the same course approval number.
- 100.14.5-15.9 Institutions, seminar presenters, and others may seek approval of their training or educational courses or programs by application to the Board or its contractordesignee. Such an application must demonstrate that their proposed material, curricula, contact hour equivalency, and facilities meet the criteria established in section 100.12.215.7.

#### 100.<del>19</del>16 FEES

100.1916.1 Application fees for <a href="mailto:new certificates">new certificates</a>, <a href="mailto:renewed of certificates">renewed of certificates</a>, and <a href="mailto:issuance of a certificates">issuance of a certificates</a> upon a Board finding of <a href="mailto:by">by</a> reciprocity shall be \$15, and shall be nonrefundable.

100.<del>1916</del>.2\_Program fees shall consist of the following.

- (a) Examination fees in the amount of \$45.00 will be charged for each examination the applicant signs up to take. Examination fees are based on the cost of preparing, administering, and scoring the certification examination.
- (b) An additional fee of \$35.00 per examination will be charged applicants who choose to take certification examinations electronically. This fee is based upon the added cost to the program of making electronic testing available.
- (c) Administration fees will be charged upon issuance of all new and renewal certificates and will be based on the cost of administering the operator certification program. Administration fees shall be:
  - (i) \$55.00 for each new certification certificate by examination; and
  - (ii) \$70.00 for each renewal <u>certification certificate</u> and each new <u>certification certificate</u> by reciprocity.
  - (iii) For all new and renewed certificates, a standard 6 x 9 inch certificate is available at no additional cost. A 9 x 11 inch certificate may be requested by the operator for a \$5.00 fee.
- (d) There shall be a \$20.00 fee to cover the cost of replacing certification documentation.
- (e) There shall be a \$50.00 late fee, in addition to the regular administration fee, for issuance of certificates for new <u>certification certificates</u> or <u>certification certificates</u> by reciprocity requested sixty-one (61) days or more after the date of the letter notifying the applicant of eligibility to receive certification.
- (f) There shall be a \$50.00 late fee, in addition to the regular administration fee, for the renewal of any certificate for which the renewal application is submitted after the expiration date of the certificate being renewed.
- (g) Training unit approval fees shall be \$50.00 for each course submitted for review, except that:
  - (i) Accredited or equivalent educational institutions as referenced in subsection 100.42-13.12(b) shall not be required to submit courses for review in order for such courses to be used to satisfy training unit requirements; if such institutions choose to submit courses for review, the \$50.00 fee will apply and the applicable courses will be posted along with other approved courses;
  - (ii) An individual attending a course that has not been approved for training units may apply for training unit credit for that course for a fee of \$25.00, provided that the course will then be approved only for the individual operator requesting approval; and
  - (iii) The \$50.00 fee may be waived by the Board or its <u>contractor</u>designee on a case-by-case basis upon a determination that:

- (A) The course is offered for open enrollment at no cost to those taking the course and with no compensation to the course sponsor;
- (B) Payment of the fee would constitute a financial hardship for the course sponsor; and
- (C) In the absence of the fee waiver, it is unlikely that this training opportunity would be available to operators.

### 100.17 <u>AUTHORIZATION FOR CONTINUED OPERATION OF RESTRICTED</u> WATER DISTRIBUTION AND WASTEWATER COLLECTION SYSTEMS <u>CERTIFICATES</u>

100.17.1 Operators of water distribution and/or wastewater collection systems certified prior to January 30, 2001, under the voluntary program administered by the Colorado Water and Wastewater Collection Systems Certification Council, Inc., shall be considered compliant with the certification requirements of this provision. Upon expiration of current certificates issued under this voluntary program, all new and renewed certificates shall be valid for a period of three years. Such certification shall be renewable upon payment of appropriate fees and obtaining the required training units.

Existing operators of water distribution or wastewater collection systems as of January 30, 2001, whose responsibility includes making process control and/or system integrity decisions about water quality or quantity that may affect the public health or environment, may continue to operate the specific system in which they are currently employed for a period of two years from the issuance of an authorization for continued operation without meeting the certification requirements of this regulation, provided that they have the requisite minimum experience levels provided in section 100.9 and so long as the following requirements are satisfied:

- \_(a) The owner of the existing water distribution or wastewater collection system applies to the Board or its designee for issuance of an authorization for such operator to continue operation without compliance with the otherwise applicable certification requirements of this regulation. The owner must submit such application to the Board or its designee within one year of January 30, 2001.
- (ba) Such an The operator shall not operate any other system until he or she meets the initial certification requirements for that system and obtains a certificate appropriate for that system.
- (eb) Authorization for continued system operation under tThis provision is non-transferable, applies only to the specific system and operator and does not authorize operation of the system by any other operator.
- \_(d) Within two (2) years from the issuance of an authorization for continued operation under this provision, an operator must obtain a certificate, restricted to the operation of the specific system, by meeting all requirements for obtaining certificate renewal including payment of fees, acquiring the minimum training units, and demonstrating to the Board or its designee all requisite skills, knowledge, ability and judgment for the type of system.
- (ec) If the classification of a facility or system changes to a higher level, the authorization to continue operation under this provision expires, and is no longer valid unless the classification change occurs without any significant physical change in the system as determined by the Board or its designee.

(fd) Any operator authorized to continue operation under this provision who chooses to work for a different facility or system must meet all the initial certification requirements for that facility or system, including obtaining a certificate appropriate to that facility or system, passage of a validated written examination, and satisfaction of the minimum experience requirements of this regulation.

100.<del>22</del>\_18- 29 RESERVED

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### 100.53 <u>STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE: NOVEMBER</u> 29, 2016 RULEMAKING; EFFECTIVE JANUARY 30, 2017

Provisions of section 25-9-104, C.R.S., provide the specific statutory authority for the adoption of these amendments to the established regulatory provisions of Regulation 100 governing the requirements for water and wastewater facility operators (5 CCR 1003-2). The board hereby adopts, in compliance with section 24-4-103(4), C.R.S., the following statement of basis and purpose.

#### **BASIS AND PURPOSE**

The board held a rulemaking hearing on November 29, 2016. After receiving testimony from the division and members of the public, the board determined that it was necessary to revise Regulation 100 as follows:

Generally, the board made grammatical corrections, stylistic changes, and used simple declarative sentences when possible to avoid confusion or ambiguity. The board also made clarifications, removed duplicates and obsolete language, updated citations and numbering, and changed section titles to be more specific. The sections of the regulation were reorganized for a more logical flow and to increase readability. Sections 100.1 through 100.13 describe the various components of the operator certification program, including facility classification criteria. Sections 100.13 through 100.17 detail the certification process and requirements for obtaining and renewing certificates.

Section 100.1.3. The board created a new section titled "Severability" to make it known that if, for any reason, a portion of the regulation is held inoperative, unconstitutional, void or invalid, the validity of the remaining portions is not affected.

Section 100.1.4. The board created a new section titled "Applicability." For clarity, the board defined the categories of persons to which the regulation applies.

Section 100.1.5. The board created a new section titled "Automatic Exemptions." It is divided into four subsections covering water treatment facilities and water distribution systems, as well as certain industrial wastewater treatment facilities. Each subsection includes the criteria which, if met, automatically results in an automatic exemption from the requirement for the facility/system to operate under the supervision of a certified operator in responsible charge. Under these subsections, if the criteria are met, there is no requirement for a facility to request an exemption from the board.

Section 100.1.6. The board created a new section titled "Discretionary Exemptions." This new section outlines the procedure for facilities that do not meet the "automatic exemption" criteria of section 100.1.5 to request an exemption from the requirement to operate under the supervision of a certified operator in responsible charge. This section is comprised of a combination of language from 25-9-104.4, C.R.S. (covering water and wastewater facilities), and from section 100.6, which is specific to industrial wastewater treatment facilities. The board also removed the requirement that that was previously in section 100.6 for an adjudicatory hearing to address an industrial wastewater treatment facility exemption request. The division will evaluate exemption requests made under this section and make a recommendation to the board. The board will make a decision regarding the request at a regularly scheduled meeting.

Section 100.1.7. The board created a new section titled "Exceptions" which makes clear that the board has the authority to make exceptions to the requirements in Regulation 100 if the exception is not contrary to statute and does not endanger the public health or environment.

Section 100.2(9). The board added the definition for graywater treatment facility. In this rulemaking, the board is adding a requirement for a certified operator in responsible charge for certain graywater treatment works as defined in the *Graywater Control Regulation*, # 86, 5 CCR 1002-86.

Section 100.3. The board added a provision to clarify the role of the Water Quality Control Division, which details the scope of division enforcement authority and oversight and reserves all enforcement and oversight regarding graywater facilities to the local city, city and county, or county with a local graywater control program in accordance with the *Graywater Control Regulation*, # 86, 5 CCR 1002-86.

The board also clarified the duties delegated to its contractor and removed two provisions that were not accurate. Throughout the regulation for consistency, the board deleted the term "the board's designee" and replaced it with "the board's contractor."

Section 100.3.2. For clarity, the board added this provision from section 25-9-104.2(4), C.R.S. stating that the board retains final authority over all actions and decisions of its contractors and subcontractors.

Section 100.3.3. To accomplish better flow of the regulation, this section was moved from the former section 100.21, "Hearings and Appeals," and placed into this section of the regulation because it outlines the process for appealing decisions of the division and the board's contractor(s).

Section 100.6. The board added category D non-single family, indoor toilet and urinal flushing graywater treatment facilities, as defined in the *Graywater Control Regulation*, 5 CCR 1002-86, to domestic wastewater treatment facilities that require supervision by an ORC. Treated graywater is not potable water and is not required to be treated to potable water standards prior to recycling. Using non-potable water in homes, apartments or condominiums, schools, businesses, hotels, dormitories, etc. may increase the possibility of exposure to pathogens or other substances from partially treated water and could pose a public health risk. Current research is showing an increase in risk with each additional contributor to a graywater system, such as apartments, condominium units, hotel rooms, or numbers of people.

Ensuring that graywater treatment processes are functioning properly is a critical component in protecting public health. A certified operator is specifically trained to understand and oversee operation of treatment processes. Based on this increased risk from multiple contributors and the unique role of a certified operator in protecting public health, the board is requiring an ORC for non-single family graywater treatment facilities that supply non-potable water for toilet and urinal flushing.

The board is not requiring an ORC for category A and C single family graywater systems and category B non-single family subsurface irrigation graywater systems as defined in the *Graywater Control Regulation*, 5 CCR 1002-86.

Section 100.9.7. To accomplish better flow of the regulation, the board moved this provision dealing with the appeal rights of facility owners regarding a violation of the responsibility to have an ORC from the former section 100.21, "Hearings and Appeals."

Section 100.15.5 (f)-(j). For clarification and transparency, the board added certain provisions from Policy #15-3 regarding timing of training units.

Section 100.15.8. The board clarified the criteria for a certified operator to receive double training units for teaching a board approved classroom course.