



CO L O R A D O

**Water & Wastewater Facility
Operators Certification Board**

Department of Public Health & Environment

Colorado Operator Certification Program 2015 Annual Report to US Environmental Protection Agency

July 1, 2016

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Introduction

In 1999, the U.S. Environmental Protection Agency (EPA) issued operator certification program guidelines specifying minimum standards for certification and recertification for the operators of community and non-transient non-community public water systems. The goal of the operator certification program is to ensure that skilled professionals are overseeing the treatment and distribution of safe drinking water. Operator certification is an important step in promoting compliance with the Safe Drinking Water Act (SDWA).

The State of Colorado's Operator Certification Program (program) was approved as consistent with the *Final Guidelines for the Certification and Recertification of the Operators of Community and Non-Transient Non-Community Public Water Systems*, 64 CFR 5916 (guidelines) on June 22, 2001.

This is Colorado's annual program report to EPA for calendar year 2015. In accordance with the guidelines, this report addresses the status and continued implementation of Colorado's program for the nine major program components for both community and non-transient non-community water systems. The nine program components are:

1. Authorization
2. Classification of systems, facilities and operators
3. Operator qualifications
4. Enforcement
5. Certification renewal
6. Resources needed to implement the program
7. Recertification
8. Stakeholder involvement
9. Program review

Authorization

The Water and Wastewater Facility Operators Certification Board (board) is a section of the Division of Administration within the Colorado Department of Public Health and Environment. Article 9 of Title 25, Colorado Revised Statutes (C.R.S.), requires every water and wastewater facility to be under the supervision of a certified operator holding a certificate equal to or greater than the classification of the facility. The board is authorized by 25-9-101 et. seq., C.R.S., to promulgate *Water and Wastewater Facility Operators Certification Requirements*, Regulation 100, 5 CCR 1003-2, (Regulation 100).

The Colorado Department of Public Health and Environment, Water Quality Control Division (division) has been delegated responsibility for the oversight of public water systems in Colorado to ensure compliance with and enforcement of the provisions of Regulation 100, the Safe Drinking Water Act, Regulation 11-Colorado Primary Drinking Water Regulations and other pertinent regulations.

Classification of systems, facilities, and operators

Public water systems

The division is responsible for applying board regulation and direction to classify all public water system treatment and distribution system facilities in accordance with the provisions of Regulation 100. Treatment classification is based on specific design features that include treatment processes and their complexity, source water type and design capacity. Distribution systems are classified by the population served. Water treatment facilities are classified as Class D, Class C, Class B or Class A. Class A is the highest level of classification. Water distribution systems are classified as Class 1, Class 2, Class 3 or Class 4. Class 4 is the highest level of classification.

Certified operator

Regulation 100 requires every water and wastewater facility to be operated under the supervision of a certified operator in responsible charge who holds a certificate equal to or greater than the classification of the facility. The regulation also reserves all process control and system integrity decisions to the certified operator in responsible charge or another operator holding a certificate equal to or greater than the classification of the facility in accordance with a written operating plan. The certified operator in responsible charge or another operator who holds a certificate equal to or greater than the classification of the facility must be available at all times during operating hours of a water treatment or distribution facility.

Compliance with operator certification requirements is a Colorado Safe Drinking Water Program priority. Table 1 represents the systems in compliance with the certified operator requirements.

	Number of facilities	In compliance	Compliance rate
Community treatment	743	724	97%
Community distribution systems	858	836	97%
Non-Transient Non-Community treatment	154	148	96%
Non-Transient Non-Community distribution system	103	99	96%

Table 1 - System compliance rates

Non-compliance is a result of one of the following circumstances:

1. A certified operator has not been designated by the system's owner.
2. The operator's certificate has expired.
3. The operator's certificate is not at the correct level for the facility they are operating.

Operator qualifications

Active operators

Colorado requires separate treatment and distribution certificates. Active drinking water certificate counts are listed by category in Table 2. Colorado also grants a Class S certificate that combines treatment Class D and distribution Class 1 operator certificates

designed specifically for public water systems serving a population of less than 3,300 with basic treatment processes. Many operators hold multiple certificates.

Certificate Levels*	Active certificates
Distribution 4	882
Distribution 3	295
Distribution 2	798
Distribution 1	1091
Total distribution	3465
Water Class A	845
Water Class B	418
Water Class C	729
Water Class D	1090
Class S	653
Total treatment	3736

* Class A is the highest level of treatment classification. Class 4 is the highest level of distribution system classification.

Table 2 - Active operator certificates

Exam pass rates

Successfully passing exams is vital to maintain a steady workforce of certified operators. Low pass rates at the higher levels continues to be an area of concern. In 2012 the program began requiring sequential testing. Sequential testing requires the applicant to hold a valid certificate at the level immediately below the level of the exam they apply to take.

The 2015 average pass rates for water treatment and distribution written exams are 45 percent and 62 percent for electronic exams. The program attributes the difference in pass rates between written and electronic exams to several factors. Traditional paper and pencil exams are taken in a room with as many as 400 people. The entire exam booklet is in front of the examinee, which can be overwhelming and distracting. By comparison, electronic exams are administered in a room with less than 24 people taking the exam at a time. The atmosphere is quiet, more relaxed and questions are presented one at a time, which reduces distractions and allows the examinee to focus on the question in front of them.

Level	# exams	pass %	Level	# exams	pass %
WA	43	14	D4	47	17
WB	51	61	D3	68	22
WC	45	78	D2	108	44
WD	113	60	D1	208	26
WS	49	88	Total	431	27
Total	301	60			

Table 3 - Written exam pass rates

Level	# exams	pass %	Level	# exams	pass %
WA	79	38	D4	92	33
WB	69	61	D3	88	49
WC	69	75	D2	125	57
WD	121	78	D1	187	73
WS	27	96	Total	492	53
Total	365	70			

Table 4 - Electronic exam pass rates

The average pass rate for all water treatment exams is 65 percent. The average pass rate for distribution exams is 53 percent. The overall pass rate for water treatment and distribution is 59 percent.

The average pass rate for all exams administered by the program is 56 percent. This represents a drop from a high of 61 percent in 2014. The program has not made any changes that would explain the five percentage point drop in exam pass rates for the reporting year. The average pass rates for written and electronic exams from 2008-2011 was 55 percent. The 2015 average pass rate is in keeping with the historic program exam pass rates.

Operator certification-capacity development partnership

The Local Assistance Unit was developed by the Colorado Safe Drinking Water Program. This unit works in partnership with drinking water systems, assistance partners and division staff from various program areas. The partnership reaches operators and system owners on a grassroots level to improve compliance, enhance water quality, better position a system managerially, financially, and technically for the future and to protect public health. The Local Assistance Unit's purpose is to provide technical, management and financial assistance one-on-one and through group trainings to public water systems so they can strengthen their ability to supply safe drinking water to the public and to protect their source water.

The operator certification staff person serves as the liaison to the WWFOCB and provides outreach and compliance assistance to operators and system owners and is in the Local Assistance Unit. This ensures alignment with capacity development efforts including training, certification challenges and improved assistance to facility owners.

The division has increased outreach to operators in an effort to address the identified areas of concern:

- The division sponsors no or low-cost trainings offered in multiple sites across the state with a focus on operations, math and regulations.
- In 2014, division coaching staff provided 186 on-site, individual operator training sessions at no cost and class room style training sessions and presentations at other schools and conferences.
- Division compliance, operator certification and engineering staff regularly present at conferences, seminars and other training venues throughout the state on various regulatory compliance topics.
- Operator certification staff participates in the Rocky Mountain Section AWWA small systems education committee which provides training targeting small system operators.

- The Local Assistance Unit provides support for Colorado's Water and Wastewater Agency Response Network (CoWARN) and works with them to provide systems and operators with emergency preparedness and response training.

Grandparenting

This option was only available to water distribution operators and was valid for two years. The grandparenting provision allowed an operator who was certified before January 30, 2001 under the voluntary program administered by the Colorado Water and Wastewater Collection Systems Certification Council, Inc. to continue operating for two years.

All operators were required to obtain a standard or a restricted certificate no later than January 30, 2003. A standard certificate required qualifying for and passing a standardized exam. The restricted certificate was issued to an operator who was certified under the voluntary program and was renewable upon payment of fees and having obtained the required training units. Restricted certificates were valid as long as the operator continued employment at the same facility where they worked on January 30, 2001 and the facility classification remained the same.

There are 99 operators holding 125 restricted certificates. All others granted a restricted certificate have either allowed the certificate to expire or have successfully passed a certification exam and no longer rely on a restricted certificate.

Enforcement

Facility enforcement

Enforcement authority under 25-9-110(3), C.R.S. is granted to the department to issue and enforce administrative orders and to impose civil penalties against facility owners for failure to operate their systems under the supervision of a certified operator. In 2015, there was one formal enforcement action also called Notices of Violation against a public water system for violating the certified operator requirements.

Operator disciplinary action

The board has authority under 25-9-104(6), C.R.S. to establish criteria for the discipline or reprimand of an operator. Section 100.23.3 grants the division authority to investigate instances of possible misconduct by certified operators. In 2015, there were three new disciplinary action investigations in 2015. One was dismissed as lacking sufficient evidence of misconduct. The second investigation resulted in the issuance of an informal letter of reprimand from the division. The third resulted in the board revoking both the operator's water treatment and water distribution certificates.

Certificate renewal

Certificate renewal and professional development

Regulation 100 requires on-going professional development to renew certificates every three years. As an incentive to maintain certificates in current status, a late fee of \$50 is charged to

an operator who submits the renewal application after the certificate's expiration date. Training courses used to fulfill the professional development requirement must be approved by the board or its contractor.

Individual operators are responsible for tracking and reporting training units for certification renewal. Certificates of completion and transcripts are reviewed to determine fulfillment of the professional development requirements. In 2015, more than 500 courses approved for operator professional development were offered. Many of these classes were held multiple times within the year. The price for each course varies from no charge to several hundred dollars for multiple day training.

Colorado does not maintain a clearinghouse that tracks the number of classes taught by an instructor or institution, the number of attendees at each training class or the cost to the student for each course. Courses approved for training units are not ranked by certification level.

Trainers submit applications for training units which are approved by a committee of volunteer subject matter experts who review all applications and assign the training units. Upon approval, the course is entered into the database of approved training courses. A list of approved courses is available on-line at www.ocpoweb.com.

Resources needed to implement the program

Colorado uniquely contracts the operator certification and examination aspect of the program to a non-profit organization comprised of subject matter experts who volunteer their time and expertise. The contractor subcontracts daily operations to Total Events and Management Services, Inc. (TEAMS). TEAMS manages the Operator Certification Program office, which oversees the daily operation of the operator certification portion of the program.

Income to support the Operator Certification Program office originates from fees charged to applicants and operators as authorized by statute and Regulation 100. These fees cover the costs of management for this portion of the program. In 2015, subject matter experts volunteered nearly 3,400 hours reviewing applications and training courses, proctoring exams and completing other contractual activities. This is equivalent to approximately one and a half full-time employees.

Operator certification fees do not fund agency staff. All agency staff funding is provided through state general funds, general program fees and various federal grants. The division has one full-time employee dedicated to operator certification who serves as staff to the board and as the division liaison to the board. In addition, compliance with the requirements of Regulation 100 is performed by the drinking water compliance and enforcement staff and compliance is checked on-site by field services section staff during sanitary surveys. Facility classification is done at the time of design review by engineering section staff. The division's data system, management and administrative teams provide necessary support for the program as well. The board's administrator and staff represent approximately 0.2 full-time employees. In total there are over 65 division staff members with responsibilities related to the certified operator program.

Under the current organization, Colorado has sufficient resources to implement its operator certification program now and into the future.

Recertification

Certificates are valid for three years from the date of issue. Once an operator's certificate has expired, they are no longer certified. A certificate may be restored, through renewal, for up to two years after the expiration date. A certificate is automatically revoked after two years if it is not renewed. Subsequently, if the person desires to be re-certified they are treated as a new applicant for certification and must sequentially re-test.

Stakeholder involvement

Rulemaking

In November 2014, the division began the regulation revision process. Approximately 8,000 people were invited to participate in the stakeholder process. Those invited included certified operators, system owners and other interested parties. The hearing to consider the proposed amendments to the regulation was held on June 30, 2015. The WWFOCB promulgated changes to Regulation 100 at that time.

The Office of Legislative Legal Services, which conducts legal reviews of all newly-promulgated agency rules, expressed concern after the August 2015 adoption of section 100.15.3 that the language describing "professional manner" was too vague to meet the requirements of the Colorado Administrative Procedures Act, 24-4-101 et. seq., C.R.S. To address these concerns, the board held a rulemaking hearing on December 9, 2015 and adopted changes to section 100.15.3 to delete the concept of "professional manner," and instead to specifically prohibit certain types of behavior when a certified operator is acting in a professional capacity. These prohibited behaviors are related to a certified operator's demeanor while communicating/interacting with the public, the regulated community and regulators. The board similarly revised section 100.20.1(j) to clarify that certified operators who exhibit such behavior are subject to disciplinary action by the board.

The current Regulation 100 is included as Appendix A of this report along with a summary of changes made as Appendix B.

WWFOCB meetings

The WWFOCB held six meetings in 2015; all meetings are open to the public and participation is encouraged. The April meeting was held in conjunction with the annual Colorado Rural Water Association conference. There were approximately 100 in attendance at the April 2015 meeting.

AquaTalk newsletter

The Safe Drinking Water Program publishes a quarterly newsletter that is distributed to approximately 3,000 system owners, operators and others each quarter. The newsletter is also published and available on the division web site. Each newsletter contains at least one article specifically focusing on operator certification topics of interest and any changes to regulation

or board policy. Google *CDPHE aqua talk* to find electronic copies of the Aqua Talk newsletter.

Program review

The division conducts periodic reviews of its processes, procedures and data management. Each public water system is assigned to one compliance specialist. The compliance specialist oversees all compliance and enforcement activities related to a specific water system in regards to both drinking water regulations and operator certification regulations. This is a holistic approach that enhances communication between the division and the regulated community and has improved program efficiency and effectiveness.

The program has not conducted an external program review in accordance with published EPA guidance and direction. The division is working with adjoining state operator certification programs to assist each other with an external review using the Association of Board's of Certification Model Standards as guidelines for evaluation. The division liaison to the board participated on the national operator certification re-energizing workgroup. The workgroup developed suggested methods for conducting external reviews. The division continues to work toward developing a standardized approach to conducting both internal and external reviews.

Conclusion/summary

Colorado's facility operator certification program is meeting the requirements for the nine major program components for community and non-transient non-community water systems in accordance with the guidelines.

Appendix A

Water and Wastewater Facility Operators Certification Requirements, Regulation 100

5 CCR 1003-2

1. effective August 30, 2015
2. effective January 30, 2016

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

REGULATION NO. 100

5 CCR 1003-2

Amended:	May 28, 2002
Effective Date:	July 30, 2002
Amended:	March 25, 2003
Effective Date:	June 2, 2003
Amended:	October 26, 2004
Effective Date:	December 30, 2004
Emergency:	November 30, 2004
Amended:	November 30, 2004
Effective Date:	January 30, 2005
Amended:	October 25, 2005
Effective Date:	January 1, 2006
Amended:	February 14, 2006
Effective Date:	April 30, 2006
Amended:	July 31, 2007
Effective Date:	September 30, 2007
Amended:	April 28, 2009
Effective Date:	June 30, 2009
Amended:	September 29, 2009
Effective Date:	November 30, 2009
Amended:	November 24, 2009
Effective Date:	January 30, 2010
Amended:	November 29, 2011
Effective Date:	January 30, 2012
Amended:	April 24, 2012
Effective Date:	June 30, 2012
Amended:	August 26, 2014
Effective Date:	October 30, 2014
Amended:	June 30, 2015
Effective Date:	August 30, 2015
Amended:	December 9, 2015
Effective Date:	January 30, 2016

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COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT

WATER AND WASTEWATER FACILITY OPERATORS CERTIFICATION REQUIREMENTS

REGULATION NO. 100

5 CCR 1003-2

100.1 AUTHORITY AND PURPOSE

100.1.1 Authority

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

100.1.2 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 100.9. Operators are encouraged to apply for certification in the highest classification consistent with their qualifications.

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) "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.
- (10) "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.
- (11) "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. 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.
- (12) "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.
- (13) "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.
- (14) "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.
- (15) "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.
- (16) "WASTEWATER TREATMENT FACILITY" means either a domestic wastewater treatment facility or an industrial wastewater treatment facility.
- (17) "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.
- (18) "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.

- (19) "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 ADMINISTRATIVE FUNCTIONS

100.3.1 In carrying out its responsibilities to administer the operator certification program pursuant to Article 9 of Title 25, C.R.S., the Board or its designee may carry out any of the following duties, including but not limited to:

- (a) administering the operator certification program;
- (b) collecting program fees for administration of the operator certification program;
- (c) administering validated examinations for operator certification;
- (d) 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;
- (l) evaluating work experience of applicants;
- (m) evaluating and approving training units for renewal of certificate;
- (n) evaluating and approving 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;
- (r) conducting failed exam reviews; or
- (s) preparing and distributing annual reports.

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

Description of the Facility	Plant Design Flow (in MGD)			
	Below 2	2 – 5	5.01 – 9.99	10 or more
<u>Ground Water Systems</u>	.	.	.	.
(a) Ground water source with no treatment or with no additional treatment beyond chlorine disinfection.	D	D	C	B
(b) Ground water source with ultraviolet or ozone disinfection.	D	C	C	B
(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.	C	C	B	B
<u>All Water Systems</u>				
(d) Any source utilizing bag or cartridge filtration to comply with primary drinking water standards ¹ . “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 re-used.	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.	C	B	B	A
(f) Any source utilizing conventional or direct	B	A	A	A

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.				
<u>Chemical Addition</u>	.	.	.	.
(g) Any source utilizing chemical treatment for the specific purpose of complying with secondary drinking water standards ² .	C	C	B	B
(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 ¹ .	B	B	A	A
(i) Any source utilizing chemical treatment for the specific purpose of controlling corrosion (i.e., lead and copper) in the distribution system.	C	C	B	B
(j) Any source utilizing fluoridation.	C	C	C	B
<u>Other</u>	.	.	.	.
(k) Water vending machines connected to a public water system that does not currently meet primary drinking water standards ¹ .	C	C	C	C

¹ "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.

² "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.

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

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 shall not be classified.

100.5 DOMESTIC WASTEWATER TREATMENT FACILITY CLASSIFICATION

100.5.1 Domestic wastewater 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	0.5-1.00	1.01-2.00	2.01-4.00	Above 4.00
(a) Waste stabilization ponds, including aerated and non-aerated types	D	C	C	B	B
(b) Trickling filter or rotating biological contactor	C	C	B	B	A
(c) Extended aeration process sequencing batch reactors (SBR) designed to operate in the extended aeration loading range.	C	B	B	B	A
(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.	B	B	B	B	A
(e) Recirculating sand filtration	D	C	C	C	C

(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.
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100.5.3 The classification of any domestic wastewater treatment facility may be changed at the discretion of the Division by reason of changes in any condition or circumstance on which the classification was predicated.

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:
 - (A) which discharge pursuant to a general industrial permit for Water Treatment Plant Wastewater Discharge, provided that the permitted water treatment 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; or
 - (B) which discharge pursuant to an industrial stormwater permit, a construction stormwater permit, a municipal stormwater permit, or a general industrial permit for the following: Construction Dewatering Activities; Aquatic Animal Production with Continuous and Intermittent Discharge; Sand and Gravel Process Water and Stormwater; Minimal Industrial Discharge; Subterranean Dewatering and Well Development; Hydrostatic Testing of Pipelines, Tanks and Similar Vessels; Non-Contact Cooling Water; Pesticides; or Commercial Washing of Outdoor Structures that meet both of the following conditions:
 - (I) 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; 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 a Class

2 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.

- (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.
- (iii) 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.
 - (A) Considering the criteria in sections 25-9-104(4)(a) through (d), C.R.S., the Board may approve class 2 classification for such a facility where it determines that the facility has demonstrated that:
 - (I) 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, 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.
 - (B) The Division shall evaluate a written request from the facility and shall provide the Board with a classification recommendation based 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.
 - (C) The Board shall approve or deny such classification requests at an adjudicatory hearing to be held at a regularly scheduled Board meeting.
 - (D) Each facility classified as a Class 2 facility under the authority of this subsection shall re-certify in writing, by December 31st of each year, that the conditions in part (A) of this subsection continue to be met.
- (iv) The Board has the authority to reclassify any 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.

(c) Class 1 Industrial Wastewater Treatment Facilities.

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)

<u>CLASSIFICATION</u>	<u>TREATMENT PROCESS¹</u>
Class A	Chemical conversion (e.g., cyanide destruction, hexavalent chromium reduction); Ion 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.

¹ 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 changes in any condition or circumstances on which the classification was predicated.

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.

100.7 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>	<u>POPULATION SERVED</u>
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 changes in any condition or circumstances on which the classification was predicated.

100.7.4 Water distribution systems 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 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 changes in any condition or circumstances on which the classification was predicated.

100.9 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 Basic Requirements for Certification by Examination

- (a) Applicants shall be evaluated by the Board or its designee as to education, experience, and knowledge related to the classification level for which the applicant seeks to be certified.
- (b) 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.
- (c) 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 100.9.8.

100.9.3 Minimum Educational Requirements for Certification by Examination

- (a) Applicants must have a high school diploma or a general equivalency diploma (GED), except as provided in section 100.9.3(c)
- (b) 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:
 - (i) have an additional six (6) months of qualifying experience; and
 - (ii) demonstrate the completion of 1.0 training units in a course approved as a substitute for entry-level experience requirements.
- (c) 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.
 - (i) 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.
 - (ii) After passing the examination, the certificate will be issued upon submitting proof of the high school diploma to the Board or its designee.

100.9.4 Experience Determinations for Certification by Examination

- (a) No more than one year of experience will be credited for employment/activities during any one calendar year.
- (b) 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.
- (c) The aggregate time spent operating multiple facilities shall be considered in any determination of whether to credit full-time experience or half-time experience.
- (d) 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.
- (e) Except as described in section 100.9.9 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.
- (f) 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.

100.9.5 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 designee will be guided by:

- (a) whether and to what degree the experience required technical knowledge of the operation of a water or wastewater facility;
- (b) 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
- (c) whether or not the experience included the responsible charge of a water or wastewater facility.

100.9.6 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.

100.9.7 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.

100.9.8 Table - Prior Certification and Experience Requirements

Certification Class	Prior Certification Required ¹	Minimum Experience Required
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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

¹ Prior certification must be for the same certification category as that of the examination being applied for.

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

- (a) Applicants for certification as Class D, Class1, 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.
- (b) After passing the examination, the certificate will be issued upon showing completion of satisfactory experience to the Board or its designee.
- (c) 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.
- (d) 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.

100.10 APPLICATION TO SIT FOR CERTIFICATION EXAMINATION

100.10.1 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 designee.

100.10.2 The Board shall designate the number of examination cycles during each calendar year.

100.10.3 For each examination cycle, the Board or its designee shall specify an application deadline.

100.10.4 All applications for certification examinations shall be made on forms provided by the Board or its designee.

100.10.5 Completed application materials and fees must be received by the Board or its designee on or before the application deadline for each examination cycle.

100.10.6 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).

100.10.7 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.

100.10.8 The Board or its designee 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.

100.10.9 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 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.

100.10.10 If an application is still disapproved after re-review, the applicant may appeal this determination to the Board.

- (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.

100.11 EXAMINATIONS

100.11.1 The Board or its designee 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 Examinations shall be held at places and times set by the Board or its designee. Advance announcements of the date and locations of examinations shall be made by the Board or its designee.

100.11.3 All examinations shall be written or administered electronically, except in such cases as the Board or its designee decide, on a case-by-case basis, represent proper exceptions to this requirement.

100.11.4 All examinations will be graded by the Board or its designee, and the applicants shall be notified of the results.

100.11.5 Examinees shall be provided an analysis of their examination performance indicating the level of knowledge demonstrated for each topic tested.

100.11.6 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.

100.11.7 Applicants who fail an examination may retest during subsequent, regularly scheduled examination cycles upon complying with all applicable application procedures including the payment of appropriate fees.

100.11.8 Any form of cheating on the part of an applicant will invalidate the results of his or her examination and may result in the applicant being barred from taking examinations for a period of 1 to 5 years, as determined by the Board following a hearing pursuant to Article 4 of Title 24, C.R.S.

100.12 EDUCATION AND CROSS EXPERIENCE SUBSTITUTED FOR EXPERIENCE REQUIREMENTS

100.12.1 Substitution of Education for Experience Requirements

- (a) Post-secondary education may also be substituted for the experience requirements of section 100.9 on the basis of successful completion of formal academic credit hours, as approved by the Board or its designee in accordance with section 100.12.2, for all or a portion of an academic year. For education substitution for experience, academic credit hours shall be calculated as follows:
 - (i) 15 semester hours = $\frac{1}{2}$ academic year = 6 months experience; 15 quarter hours = $\frac{1}{3}$ academic year = 4 months experience;
 - (ii) Training units: 300 contact hours or 30 training units = 15 quarter hours = 4 months experience;
 - (iii) 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.
- (b) Consideration of Field(s) of Study
 - (i) Credit for up to fifty percent (50%) of the applicable experience requirement of section 100.9 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 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 100.12.1(a).
 - (ii) Credit for up to twenty-five (25%) of the applicable experience requirement of section 100.9 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 100.12.1(a).

- (c) 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 may be granted for the completion of individual technically oriented courses as approved by the Board or its designee 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 100.12.1(a).
- (d) At least fifty percent (50%) of any experience requirement of section 100.9 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 100.9.

100.12.2 Approval of Training, Educational Courses, and Institutions

- (a) The Board or its designee 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-by-case determination that such courses or programs are directly and specifically relevant to the operation of water and wastewater facilities.
- (b) Approval of technically-oriented courses or programs, for purposes of substituting education for experience, shall be determined by the Board or its designee 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.
- (c) Approval of educational institutions for purposes of substituting education for experience shall be determined by the Board or its designee 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 designee the equivalency and suitability of the courses of study claimed for credit.
- (d) 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 designee. Such programs will receive credit in training units on the following basis:
 - (i) 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.
 - (ii) Three (3) training units shall equal one semester credit hour or two training units shall equal one quarter credit hour for purposes of equivalency.

100.12.3 Substitution of Cross-Experience for Experience Requirements

- (a) Cross-experience may be substituted for the experience requirements of section 100.9 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 shall be met by actual on-site operating experience in the specific certification category, water or wastewater, for which application is being made.
- (b) For the purpose of this section, "cross-experience" means that:
 - (i) 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;
 - (ii) 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;
 - (iii) 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
 - (iv) 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 CERTIFICATES

The Board or its designee shall award to the applicant a certificate designating the appropriate certification level upon satisfactory fulfillment of the requirements of section 100.13.1, 100.13.2 or 100.13.5, as appropriate, and payment of all applicable program fees listed in section 100.19.2.

New operator certificates shall be valid for three (3) years from the date of the certification eligibility notification letter. Renewal 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.

100.13.1 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 100.9.9;
 - (ii) a copy of a high school diploma pursuant to section 100.9.3(c);
 - (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.

100.13.2 Application for Renewal of Certificates

- (a) Certified operators must submit a written application for renewal to the Board or its 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 including meeting the renewal training unit requirements stated in section 100.14.
- (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 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 designee 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 100.13.2(e).

- (iv) It is the certified operator's responsibility to alert the Board or its designee 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 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 operator of a water or wastewater facility shall operate a facility in reliance on an expired certificate.
- (d) An operator may apply for renewal for two years following expiration of the certificate. The Board or its designee will renew the certificate if the operator pays the renewal and applicable late fees, as listed in section 100.19.2(d), and satisfies all applicable renewal requirements.
- (e) 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.

100.13.4 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.

100.13.5 Certificates by Reciprocity

- (a) Certificates may be issued by the Board or its 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.

- (b) Operators must submit a written application for certification by reciprocity to the Board or its designee.
- (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 100.13.1 and 100.19.

100.13.6 Certified operators shall update the Board or its designee with any changes to mailing address, telephone number, or email within 30 days of such change.

100.14 PROFESSIONAL DEVELOPMENT - TRAINING UNIT REQUIREMENTS FOR RENEWAL OF CERTIFICATION

100.14.1 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, before the operator’s certificate will be renewed.

- (a) 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.
- (b) 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.
- (c) 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.
- (d) If applicable, the training units from one course may be applied toward the renewal of more than one certificate.

100.14.2 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 Class 3	2.4 Training Units
Class A or Class 4	3.0 Training Units

100.14.3 All subject matter for which training units will be granted must be determined by the Board or its designee to be relevant and necessary to the successful operation of a water or wastewater facility.

- (a) The Board or its designee 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 section 100.14.1.
- (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 designee.
- (c) The Board or its designee 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 section 100.14.1.

100.14.4 Training units shall be awarded to certified operators for teaching a classroom course that has been approved by the Board or its designee. The training units awarded shall be double the training units approved for the course.

100.14.5 Institutions, seminar presenters, and others may seek approval of their training or educational courses or programs by application to the Board or its designee. Such an application must demonstrate that their proposed material, curricula, contact hour equivalency, and facilities meet the criteria established in section 100.12.2.

100.15 CERTIFIED OPERATOR DUTIES

100.15.1 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.

100.15.2 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 100.16.6 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.

100.15.3 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.

100.16 CERTIFIED OPERATOR IN RESPONSIBLE CHARGE DUTIES

100.16.1 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.

100.16.2 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.

100.16.3 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.

100.16.4 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.

100.16.5 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 100.16.6;
- (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 100.15.

100.16.6 Certified operators in responsible charge of a water or wastewater facility may delegate tasks or activities to other facility operators when delineated by a written operating plan.

- (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 by other facility operators under their charge.

100.17 AUTHORIZATION FOR CONTINUED OPERATION OF WATER DISTRIBUTION AND WASTEWATER COLLECTION SYSTEMS

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.

100.17.2 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.
- (b) Such an 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.
- (c) Authorization for continued system operation under this 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.
- (e) 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.
- (f) 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.

100.18 RESPONSIBILITIES OF WATER AND WASTEWATER FACILITY OWNERS

100.18.1 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 100.16.
- (d) Contracts for limited services do not fulfill the owner’s obligation, under section 100.18.1(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.

100.18.2 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 100.16.6.

100.18.3 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 100.16.6 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.

100.18.4 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:

- (a) 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.

100.18.5 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

<u>Facility or System Classification</u>	<u>Certified Operator in Responsible Charge Minimum Required Certification Levels</u>
<u>Water Systems</u>	
Water Treatment	
A	A
B	A or B
C	A, B, or C
D	A, B, C, D, S ¹ or T ²
Water Distribution	
4	4
3	4 or 3
2	4, 3 or 2
1	4, 3, 2, 1, or S ¹
<u>Domestic Wastewater Systems</u>	
Wastewater Treatment	
A	A
B	A or B
C	A, B, or C
D	A, B, C, D, or S ³
Wastewater Collection	
4	4

3	4 or 3
2	4, 3 or 2
1	4, 3, 2, 1, or S ³
<u>Industrial Wastewater Systems</u>	
A	A
B	A or B
C	A, B, or C
D	A, B, C, or D, or S ³

¹ Applicable only in accordance with section 100.18.5(d)

² Applicable only in accordance with section 100.18.5(c)

³ Applicable only in accordance with section 100.18.5(e)

- (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 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 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 as a Class “1” wastewater collection system under the provisions of this regulation.

100.18.6 The Division shall investigate any instances of possible violations of the requirements of section 100.18 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.

100.19 FEES

100.19.1 Application fees for certification, renewal of certification, and issuance of a certificate upon a Board finding of reciprocity shall be \$15, and shall be nonrefundable.

100.19.2 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 by examination; and
 - (ii) \$70.00 for each renewal certification and each new certification 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 certification or certification 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 100.12 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 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.

100.20 DISCIPLINARY PROCEEDINGS

100.20.1 The 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:

- (a) 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 100.15 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 Regulation, 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 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;
- (i) 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 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 100.16 of this regulation; 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 100.15 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.

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 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 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 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) 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.

100.20.7 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.

100.20.8 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 reliance on a suspended or revoked certificate.

100.21 HEARINGS AND APPEALS

100.21.1 Any water or wastewater facility owner who seeks a hearing in response to a Division finding of a violation under section 100.18.1 or a Department assessment of a civil penalty for such violation may request a hearing 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.

100.21.2 Any certified operator, certified operator in responsible charge, or other person affected or aggrieved by a decision of the Board's designee or the Division 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.

100.21.3 The Board shall grant any hearing request made pursuant to section 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.

100.22 - 29 RESERVED

100.30 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE; NOVEMBER, 2000 RULEMAKING

The provisions of sections 25-9-104(1)(a), (3), (4), (5) and (6), C.R.S.; 25-9-106; 25-9-106.2; 25-9-106.3; 25-9-107; 25-9-108, C.R.S., provide the specific statutory authority for the adoption of these regulatory provisions. The Board also adopted, in compliance with section 24-4-103(4), C.R.S., the following statement of basis and purpose.

BASIS AND PURPOSE

Background and Overview

The 2000 Colorado General Assembly adopted HB 00-1431, revising the certification procedures and requirements for operators of water and wastewater facilities, which include water treatment facilities, domestic and industrial wastewater treatment facilities, water distribution systems and wastewater collection systems. The bill established the composition, duties and rulemaking authority of the Water and Wastewater Facility Operators Certification Board (formerly the Plant Operators Certification Board).

The Board intends that the rules adopted pursuant to HB 00-1431 will comply with guidelines established by the United States Environmental Protection Agency (EPA) under section 1419(a) of the federal Safe Drinking Water Act, which specifies minimum standards for certification and recertification of operators of community and nontransient noncommunity public water systems. In particular, the Board anticipates that this regulation will satisfy EPA requirements and allow that agency to release to the state federal funding that is contingent on adoption of appropriate certification requirements.

Operator Classification and Qualification Issues

In this rulemaking, the Board established various classes of operators for water treatment facilities, domestic and industrial wastewater treatment facilities, water distribution systems and wastewater collection systems. Pursuant to HB 00-1431, the classes of operators established by the Board reflect the differing levels of complexity encountered in operating the various types of facilities and systems. This legislation also authorized the Board to establish separate certification classifications for operators of multiple facilities and for operators of certain small systems. Because of time constraints imposed by EPA deadlines, the Board has chosen to address the issue of operators of multiple facilities in a later rulemaking and has simply "reserved" this section at this time. The Board has made specific provisions for the certification of operators of Small Water and Wastewater Systems and for Transient Non-community Water Systems, as discussed below.

The Board also defined a process for determining the qualifications for certifying and renewing the certification of operators in each of the various classes. In accordance with HB 00-1431 and EPA guidelines, the Board adopted minimum education and experience requirements for operators, a requirement that examinations be validated, and a requirement that operators meet ongoing training requirements in order to renew their certification. The Board intends that if an

operator wishes to renew multiple certifications, the same training units may be applied to meet the requirements of more than one certification renewal if the courses in question have been accredited for each of the certifications in question. Operators with multiple certifications are encouraged to take training courses specific to each of their certifications.

The Board also chose appropriate levels at which an applicant may substitute experience for education, or education for experience, in order to allow operator certification where a combination of these components demonstrates that the operator is competent to operate a particular class of facility. Although either education or cross-experience may be substituted for a portion of the experience requirement for any classification, the Board intends that no less than 50 percent of any experience requirement must be met by actual on-site operating experience in the classification applied for. A provision providing for transitional renewal training requirements for operators whose certificates expire prior to January 30, 2004 is also included.

Minimum Experience for Entry Level Operators

According to EPA regulations, operators seeking to be certified must have a specified amount of minimum experience. Several stakeholders expressed concern that requiring a minimum amount of experience for all operators placed an undue burden on entry-level operators in rural areas of Colorado because they would not have the time or financial capability to meet such a certification requirement. In response to these concerns, the Board created a new level of certification for operators of water treatment facilities and water distribution systems serving Transient Non-community Water Systems that draw water from ground water sources not under the influence of surface water, serve less than 100

persons per day, and utilize only non-gaseous chlorine disinfection. Recognizing that such transient non-community systems are outside the scope of EPA guidelines, the Board chose not to impose a minimum experience requirement on such operators and allowed them to gain certification based solely on the passage of a written examination that focuses on subjects particularly relevant to operating this category of transient non-community water treatment facilities and transient non-community water distribution systems. For other entry level water and wastewater facility operators (Class D and Class 1), the Board has established a one-month minimum experience requirement. In order to provide flexibility to entry-level operators, the Board has established a number of options for meeting this experience requirement, including on-the-job training, apprenticeship, and on-site or correspondence training courses.

The Board also created a Small System classification for both water and wastewater facilities. These classifications apply to facilities that serve under 3300 persons and that otherwise fall into the Class D treatment and Class 1 distribution or collection classifications. Small water system operators shall be certified by taking a single examination in water treatment and distribution. Small wastewater system operators shall be certified by taking a single examination in wastewater collection and treatment. Renewal training requirements for these certificates have been set at 1.8 training units. During the transition period prior to the construction and validation of these examinations, applicants for these certifications will take both the Class D and Class 1 examinations in the appropriate category. The application and fee structures have been adjusted to reflect the degree of overlap among these requirements.

Classification of Water and Wastewater Treatment Facilities

Generally, the Board, chose to establish a system for classification of the State's water and wastewater treatment facilities according to their prior system of classification. Accordingly, the Board adopted a classification scheme which takes into consideration factors such as the size, complexity, and amount of water processed through the facility. The Board determined that it would be most efficient for the Division to retain the authority to classify facilities and modify the classification of any facility. Classification decisions by the Division can be appealed to the Board.

The Board recognizes that water treatment processes that do not utilize chemicals are more problematic and impose a greater risk on public health. Therefore, the Board requires that a higher class of distribution system be used in combination with treatment facilities that utilize ground water with a waiver of disinfection, including ultraviolet and ozone disinfection. This is due to the fact that there is no residual disinfectant in the distribution system.

Classification of Water Distribution and Wastewater Collection Systems

In classifying water distribution systems and wastewater collection systems the Board chose to initially classify the systems based on population, which the Board believes serves as an adequate surrogate for complexity. Additionally, the Board provided that the Division can change the classification of any particular facility based on complexity factors. The Board intends to revisit their initial classification scheme for water distribution and wastewater collection systems in a future rulemaking to consider adoption of a classification system that will more accurately reflect the complexities and differences between the various types of distribution and collection systems.

Fees

The new state legislation authorized the Board to adopt application and program fees which reflect the actual costs of administering the operator certification program. The Board has established a certification application fee of \$15, as specified in the statute. It also established two types of program fees: (1) an examination fee of \$25 to cover the cost of administering each examination, and (2) an administration fee that will be charged upon issuance of a certificate and upon renewal of a certificate. The administration fee will cover ongoing costs of program administration by a third party contractor. The Board did not adopt specific fee amounts in this rulemaking because the arrangements with a third party contractor,

which will determine the necessary amount of the fees, have not yet been finalized. The Board therefore is reserving the adoption of specific administration fees for a later rulemaking. The Board also anticipates that the fees established in this rulemaking may need to be revised as the transition to this new mode of implementing the operator certification program is completed.

Status of Existing Operators

The Board chose to certify under these regulations those operators of water and wastewater treatment facilities who had been previously certified under the prior certification system. The Board also chose to certify under these regulations those operators of water distribution systems

and wastewater collection systems who had been previously certified under the voluntary program administered by the Colorado Water and Wastewater Collection Systems Certification Council, based on the understanding that the voluntary certification program, and in particular the exam administered under the voluntary program, was adequate to ensure the protection of public health and the environment, and the safe operation of water distribution and wastewater collection systems.

In addition, the new regulation provides a procedure to authorize certain existing operators of existing water distribution and wastewater collection systems who have not obtained voluntary certification to continue operation of the specific systems where such operators are currently employed for a period of time without receiving a certificate. Pursuant to EPA guidelines the Board chose to allow operators of existing systems, who were authorized to make process control and/or system integrity decisions about water quality or quantity that may affect the public health or environment, to continue operation of their systems so long as certain requirements are met and a certain procedure is followed. This procedure allows owners of such systems to apply to the Board for an "Authorization for Continued Operation" for the existing operators of their system. Pursuant to EPA guidelines, the Board chose to make the "Authorization for Continued Operation" site-specific and non-transferable. To maintain this authorization, operators will need to meet the same on-going training requirements as certified operators. To move to another facility, operators would need to meet all initial certification requirements, including passing the appropriate exam. These same procedures apply to operators who hold existing restricted certificate issued under authority of the regulations being repealed in this rulemaking.

Operator Responsibilities

One section of the regulation adopted by the Board specifies the duties of certified operators and defines certain standards of performance for certified operators of affected facilities. The regulation requires certified operators to exercise reasonable care and judgment while performing their duties and in supervising facility operations. The regulation also requires operators to keep current with the Board information on where the operator(s) can be contacted so that the Board can notify the operator(s) of certification expiration, renewal requirements, and testing information.

Owner Responsibilities

Another section of the regulation adopted by the Board specifies the duties of owners of water and wastewater facilities. Pursuant to the legislation and EPA guidelines, the Board chose to require owners to place the direct supervision of their facilities under the control of an "operator in responsible charge" holding a valid certification equal to or greater than the classification of the facility. The Board clarified that a direct supervisor relationship exists if the operator in responsible charge has supervisory responsibility and authority with respect to other operators. The Board does not intend for direct supervision to mean that the operator in responsible charge must be on-site at all times.

In order to meet EPA guidelines, the Board required that all process control and/or system integrity decisions about water quality or quantity that may affect the public health or the

environment be made by either an operator in responsible charge or another certified operator. This operator must be certified at a level equal to or higher than that of the facility. The Board also required owners to designate a certified operator who would be available for each operating shift. The Board clarified that in order for an operator to be "available," he or she must be on-site or able to be contacted as needed to initiate appropriate actions in a timely manner.

Finally, the regulation requires owners to submit to the Board information on the operator(s) in responsible charge of their facility so that the Board and Division can more efficiently enforce the provisions of this regulation and better protect the public health.

Division Enforcement Procedures

HB 00-1431 also set out the roles of the Water Quality Control Division and the Board in enforcing the new operator certification program. The Board recognized the role of the Division as the agency primarily responsible for investigating and reporting to the Board any misconduct by water and wastewater facility operators. Any disciplinary action regarding operators would be taken by the Board, after an opportunity for a hearing. Pursuant to the legislation, the Board also chose to allow owners of water and wastewater facilities to seek a hearing before the Board in response to a Division finding of a violation of the regulations or in response to a Department assessment of a civil penalty. The rule also establishes a process by which any person, affected or aggrieved by a decision of Division or a third party contractor implementing certain aspect of the program may seek relief through an appeal or hearing before the Board.

Nonprofit Contractors Issues

HB 00-1431 authorized the Board to appoint one or more independent nonprofit corporations to administer the operator certification program, including providing examinations, issuing certification documents, evaluating continuing training requirements for renewal of certification, and evaluating requests for reciprocity. The Board specified in the new regulation the program administration duties that it may choose to delegate to a nonprofit corporation.

100.31 FINDINGS IN SUPPORT OF EMERGENCY ADOPTION OF REGULATION NO. 100; DECEMBER 5, 2000

In addition to its adoption of Regulation No. 100 in accordance with the standard procedures specified in section 24-4-103, C.R.S., which result in an effective date for this regulation on a permanent basis of January 30, 2001, the Board also is adopting the rule on an emergency basis with an effective date of December 5, 2000.

In order to satisfy the new federal requirements noted in section 100.30 above, the modified operators certification program established by these regulations must be in effect by February, 2001. In addition, the new state legislation noted above, which became effective in May, 2000, mandates that the state's operators certification program be implemented in accordance with its provisions. This new regulation needs to be in effect to assure that program implementation is consistent with the new statutory provisions. Because the already-established 2001 certification examination cycle begins in January, 2001, with an application deadline of December 15, 2000, there would be substantial disruption to the certification program, with serious financial implications for operators whose employment depends upon obtaining certification, if this new regulation did not become effective immediately.

Therefore, the Board finds that the immediate adoption of Regulation No. 100 with an effective date of December 5, 2000 is imperatively necessary to comply with state law and for the preservation of public health, safety and welfare, and that compliance with the requirements of section 24-4-103, C.R.S. as to the normal effective date for new regulations would be contrary to the public interest.

100.32 FINDINGS IN SUPPORT OF EMERGENCY ADOPTION OF REVISIONS TO REGULATION NO. 100.22.2(b); JANUARY 30, 2001

In order to satisfy the new federal requirements noted in section 100.30 above, the modified operators certification program established by the Board's regulations must be in effect by February 5, 2001. In its December 5, 2000 rulemaking, the Board reserved a provision in section 100.22.2(b) for an administration fee. This rule revision establishes the amount of the fee.

The Board has determined that collection of a fee to help cover the costs of administration of the Operators Certification Program by nonprofit, third party contractors is necessary to effectively carry out the program. The Board also concludes that immediate imposition of the fee is necessary in order to assure that the program is fully implemented by the federal deadline. Therefore, the Board finds that the immediate adoption of the administration fee in section 100.22.2(b) with an effective date of January 30, 2001 is imperatively necessary to comply with state law and for preservation of public health, safety and welfare, and that compliance with the requirements of section 24-4-103, C.R.S. as to the normal effective date for new regulations would be contrary to the public interest.

100.33 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE; ARCH, 2001 RULEMAKING

The provisions of sections 25-9-104(1)(a), (3), (4), (5) and (6); 25-9-105; 25-9-106.3; 25-9-107; 25-9-108, C.R.S., provide the specific statutory authority for the adoption of these regulatory provisions. The Board also adopted, in compliance with section 24-4-103(4), C.R.S., the following statement of basis and purpose.

BASIS AND PURPOSE

The 2000 Colorado General Assembly adopted HB 00-1431, revising the certification procedures and requirements for operators of water and wastewater facilities, which include water treatment facilities, domestic and industrial wastewater treatment facilities, water distribution systems and wastewater collection systems. The bill established the composition, duties and rulemaking authority of the Water and Wastewater Facility Operators Certification Board (formerly the Plant Operators Certification Board).

The new state legislation authorized the Board to adopt application and program fees that reflect the actual costs of administering the operator certification program. The Board has previously established a certification application fee of \$15, as specified in the statute. Regulation No. 100 also provides for two types of program fees: (1) an examination fee to cover the cost of administering each examination, and (2) an administration fee that will be charged upon issuance of a certificate and upon renewal of a certificate. The Board has previously established an examination fee of \$25.

On January 30, 2001, the Board adopted on an emergency basis an administration fee of \$60.00 for each new and renewal certification. This administration fee will cover ongoing costs of program administration by one or more third party contractors. The amount of this fee is based upon evidence presented in the emergency rulemaking hearing regarding the actual costs of program administration, taking into account a level of uncertainty associated with this new third party role. In this rulemaking, based on the evidence presented the Board has readopted this same administration fee. The Board intends that the amount of this fee will be revisited from time to time in the future as more experience with implementation of the Operators Certification Program by the third party contractors is gained.

Section 25-9-104 (1)(a) C.R.S. requires a failed examination review without specifying any specific format or requirements for this review. The current regulation (section 100.11.5, 5 C.C.R. 1003-2) contains a similar requirement. It is possible, however, to interpret the regulation as requiring that failed examinees be permitted to review actual copies of the examination. The Board recognizes that providers of standardized examinations are reluctant to permit, and often refuse to permit, copies of their examinations to be available for individual review. These providers generally produce detailed,

individualized statistical analyses of examination results. Such analyses can form the basis for a meaningful review of individual's performance on examinations.

The Board, therefore, has decided to amend the regulatory language to more clearly reflect the statutorily permitted flexibility regarding failed examination reviews. The specific format of failed examination review sessions may be determined by the Board or its designee, consistent with the restrictions imposed by the provider(s) of the standardized examinations used in certification testing.

100.34 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE; AUGUST, 2001 RULEMAKING

The provisions of sections 25-9-104(1)(a), (3), (4), (5), (6) and (6.5); 25-9-105; 25-9-106.3; 25-9-107; 25-9-108; and 25-9-110, C.R.S., provide the specific statutory authority for the adoption of these regulatory provisions. The Board also adopted, in compliance with section 24-4-103(4), C.R.S., the following statement of basis and purpose.

BASIS AND PURPOSE

1. Subsections 100.18.2 and 100.18.3:

The previous version of section 18, 5 C.C.R. 1003-2, made provision for the continuance of the certifications of water distribution and wastewater collection operators who are (as of January 30, 2001) currently certified under the voluntary certification program administered by the Colorado Water Distribution and Wastewater Collection Systems Certification Council by declaring, in section 100.18.1, that such certifications will be considered valid. Operators who have not been certified under the voluntary program have an opportunity to obtain either a full or a restricted certification under the provisions of section 100.18.2. No provision was made to address those operators who hold either expired voluntary certifications or who are under-certified for the level of their job responsibility. This amendment broadens the scope of section 100.18.2 to include such operators.

The original structure of the first paragraph of section 100.18.2 mixed provisions applicable to two distinct groups of operators: those currently operating water distribution and wastewater collection systems and those holding restricted water or wastewater treatment certifications valid under the previous version of these regulations. This admixture of subjects makes the language and interpretation of the existing regulation awkward. Therefore, a new section, 100.18.3, is appropriate. This section applies specifically to operators who hold currently valid restricted water and wastewater treatment certificates.

2. Subsections 100.23.3 and 100.23.4:

Section 25-9-104(6.5), C.R.S., vests the responsibility to investigate instances of possible operator misconduct with the Water Quality Control Division, not with an "other Board designee". Similarly, sections 25-9-110(3) through 25-9-110(6), C.R.S., vest enforcement authority for violations of section 25-9-110(2), C.R.S., with the Division. The enforcement of section 100.21, 5 C.C.R. 1003-2, is also vested in the Division. The original language of sections 100.23.3 and 100.23.4 of the regulation did not accurately reflect this placement of responsibility. The language adopted by the Board eliminates reference to designees of the Board as investigative agents.

3. Subsection 100.11.8:

Similar to subsections 100.23.3 and 100.23.4, this section was revised to eliminate the reference to designees of the Board, since the hearing in question would appropriately be held by the Board.

4. Subsection 100.21.5:

This subsection was revised to clarify that higher levels of water treatment certifications are acceptable for operators in responsible charge of transient non-community water systems. Therefore, for example, an operator with a level "D" water treatment certification may be an operator in responsible charge for a transient non-community system and need not hold a separate water distribution system certification. On the other hand, that operator must hold a level "1" or higher water distribution certification in addition to the level "D" water treatment certification to be a designated operator in responsible charge of a small water system. The Board intends that small systems may have a single operator with the required certifications, or may have multiple operators who together hold the required certifications.

100.35 FINDINGS AND STATEMENT OF BASIS AND PURPOSE FOR ADOPTION ON AN EMERGENCY BASIS OF REVISIONS TO REGULATION NO. 100 JANUARY, 2002 RULEMAKING

On January 29, 2002 the Board adopted revisions to Regulation No. 100, Water and Wastewater Facility Operator Certification Requirements [5 CCR 1003-2] to establish a new subsection 100.14.6, regarding "supplemental training" both on an emergency basis pursuant to § 24-4-103(6), C.R.S., and as a final rule pursuant to § 24-4-103, C.R.S.

The Board has established a new category for "supplemental training" courses. These courses are those that are found to provide useful operator knowledge but are not directly related to water or wastewater facility operations. Examples of such courses would include courses on topics such as first aid or word processing skills, which provide general knowledge that may be useful to certified operators, but do not contribute directly to an operator's professional water or wastewater facility expertise and knowledge. Supplemental training courses would be ones that do not fall into the specific categories listed in subsection 100.14.4 (a) through (e).

The Board has determined that it is appropriate to allow training units associated with such supplemental training courses to be used for up to (but not more than) 50% of the training requirements to renew a certificate. This system will allow operators to get credit for obtaining training in useful general subject matter areas, while assuring that at least half of the training units relied on for renewal are related to courses that are directly applicable to water and wastewater facility operational expertise.

The Board's permanent rule adoption complies with the hearing procedures and notice requirements of § 24-4-103, C.R.S. The Board concludes that adoption of the same requirements on an emergency basis is imperatively necessary to protection of public health and safety and that compliance with the effective date provisions of § 24-4-103, C.R.S., would be contrary to the public interest. The purpose of the emergency adoption is to assure that operators seeking certificate renewal prior to the effective date of the permanent rule obtain training that is directly related to water and wastewater facility operational expertise, thereby advancing the purposes of operator certification -- protection of public health and safety. In addition, emergency adoption will minimize confusion and inequity between the types of approval given to operator training courses in 2002.

100.36 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE; JANUARY, 2002 RULEMAKING

The provisions of sections 29-5-104(1)(a), 25-9-104(3), 25-9-104(4) and 25-9-106.2, C.R.S., provide the specific statutory authority for the adoption of these regulatory provisions. The Board also adopted, in compliance with section 24-4-103(4), C.R.S, the following statement of basis and purpose.

BASIS AND PURPOSE

1. Section 100.6:

The Board recognizes that there are a variety of industrial facilities whose wastewater handling involves only physical settling, filtration, or separation processes. These facilities process wastewater without chemical addition and normally require only the monitoring of otherwise passive physical processes. The Board has determined that such facilities represent a lower degree of complexity than is represented by the "C" level of the existing industrial wastewater facility classifications. The Board also recognizes that the facilities described above do not require the supervision of an industrial wastewater facility operator having the level of expertise required of a "C" level operator. Therefore, the Board has determined that a new industrial wastewater facility classification, the "D" level is appropriate. This classification shall consist of facilities whose wastewater handling is purely physical and is without routine chemical addition or complex mechanical manipulation. Subsection 100.6.2 is amended to establish the "D" level industrial wastewater facility classification.

To provide for the proper supervision of "D" level industrial wastewater facilities, the Board establishes a "D" level industrial wastewater facility operators certification. This certification level shall have the same initial certification and renewal requirements as the "D" level water treatment and domestic wastewater treatment certifications.

To allow a degree of flexibility for facilities that only occasionally use processes classed at a higher level than those regularly employed, the Board has broadened the language of subsection 100.6.4 to allow for the occasional use of such processes without requiring a facility classification upgrade.

2. Subsection 100.9.7(a)(i):

This subsection describes the experience requirement for "D" level operators. The subsection is amended to include "D" level industrial wastewater operators within its existing provisions.

3. Subsection 100.21.5:

This subsection is amended to include "D" level industrial wastewater as a listed facility classification and operator certification level. The final paragraph of subsection 100.21.5 was made obsolete by the rulemaking of August 28, 2001, and is hereby deleted.

100.37 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE; APRIL, 2002 RULEMAKING

The provisions of sections 25-9-104(1)(a), 25-9-104(3), 25-9-104(4) and 25-9-106.2, C.R.S., provide the specific statutory authority for the adoption of these regulatory provisions. The Board also adopted, in compliance with section 24-4-103(4), C.R.S, the following statement of basis and purpose.

BASIS AND PURPOSE

Section 100.6:

The capitalization of the word "and" in the process descriptions for Class B industrial wastewater treatment facilities is an error. The case of the word "and" is, therefore, changed to lower case.

The Board recognizes that stormwater runoff is not an industrial wastewater. Therefore, the listing of "stormwater runoff control ponds" as an example of a process utilized in a class "D" industrial wastewater facility is an error and is hereby deleted.

100.38 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE; MAY, 2002 RULEMAKING

The provisions of sections 29-5-104(1)(a) and 25-9-104(3), C.R.S., provide the specific regulatory authority for the adoption of this regulatory provision. The Board also adopted, in compliance with section 24-4-103(4), C.R.S., the following statement of basis and purpose.

BASIS AND PURPOSE

In order to maintain enforcement primacy under the Safe Drinking Water Act, the State needs to approve parties who are qualified to make and to assure the quality of certain analyses required by the Environmental Protection Agency (EPA). Most of the required analyses are already made by certified operators of water treatment facilities and water distribution systems. Rather than develop a new certification program to approve parties under the EPA rules, the Board has decided to incorporate the EPA requirements into the existing operators certification program.

Beginning with the Fall 2002 examinations, the Board will expand the coverage of the certification examinations to cover the analyses required by EPA. Because the content of certification examinations is reserved by statute and regulation to the Board, the inclusion of the EPA-required analyses in the certification examinations will not require a regulatory change. However, operators who are already certified will need to acquire training in the EPA requirements. To assure that currently certified operators receive training in the EPA analysis and quality assurance requirements, an ongoing training requirement, to be completed within three years of the start of the Fall 2002 examination cycle, is hereby established.

100.39 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE: MARCH 2003 RULEMAKING

Provisions of section 25-9-104(1)(a), C.R.S., provide the specific statutory authority for the adoption of these amendments to the established regulatory provisions of Regulation 100 (5 CCR 1003-2). The Board also adopted, in compliance with section 24-4-103(4), C.R.S., the following statement of basis and purpose.

BASIS AND PURPOSE

The Board has determined that the following sections must be amended in order to correct errors and to clarify the intent of the Regulation: sections 100.1.1, 100.2(15), 100.2(16), 100.4.2 – footnote #1, 100.4.2 – footnote #3, 100.6.2, 100.7.2, 100.10.1, 100.10.2, 100.10.5, 100.11.1, 100.11.8, 100.14.1, 100.14.7, 100.19.1, 100.22.4, and 100.23.5. None of these amendments are intended to substantively modify the Regulation or to change the current practice of the Board.

Section 100.9.6, which details the experience requirements for certification, was reorganized to clarify the experience required for various certification levels. The Board also made explicit its long-standing practice of considering domestic and industrial wastewater treatment experience to be interchangeable for purposes of qualifying to sit for a certification examination.

The failed examination review required by statute (25-9-104, C.R.S.) is non-specific as to format; the Board has determined that the corresponding regulatory provision, section 100.11.5, shall likewise be non-specific as to format. This change permits the Board to accept the detailed, individualized analyses prepared by the examination provider as an appropriate examination review.

The Board has determined that the training required for certification renewal will have “core” and “supplemental” components. The amendment to sections 100.14.4 through 100.14.6 adopted by the Board clarifies the relationship between core and supplemental training, gives examples of core subject matter, specifically authorizes the granting of supplemental credit for non-listed topics, and reorganizes the sections so that they are more readily understood.

Section 100.18.3 is obsolete and substantively conflicts with the broad acceptance of prior certifications granted in section 100.9.1. The Board has determined that section 100.18.3 should be deleted.

100.40 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE: OCTOBER 2004 RULEMAKING

Provisions of section 25-9-108, C.R.S., provide the specific statutory authority for the adoption of these amendments to the established regulatory provisions of Regulation 100 (5 CCR 1003-2). The Board also adopted, in compliance with section 24-4-103(4), C.R.S., the following statement of basis and purpose.

BASIS AND PURPOSE

A. New and Revised Fees.

The Board has revised section 100.22.2 to modify the current examination and administration fees. The existing \$25.00 examination fee is inadequate to cover the actual cost of certification exams provided by ABC. Up until now, the resulting deficit has been made up by the administration fee. However, the Board agrees with the CECTI and Certification Council proposal that it is more appropriate to increase the examination fee (to \$35.00), while reducing the administration fee (from \$60.00 to \$50.00) for those obtaining a new certification by examination. The net result will be no change in total fees for those passing a certification examination to obtain a new certification at a higher level. Those who take an examination and fail will incur a somewhat higher expense. The Board also agrees that it is appropriate not to make any change in the administration fees at this time for those obtaining renewal certifications or certification by reciprocity.

B. Cross-Experience Training for Certification Renewal.

Subsection 100.14.1 has been revised to allow a portion of the training units required for certification renewal to be obtained from courses approved as core training in categories other than the operator category for the certification being renewed. The Board has determined that this is consistent with the fact that "supplemental" training courses on a wide variety of topics are already allowed to provide a portion of the training units for certification renewal. This approach is also consistent with the fact that up to 50 percent of the experience requirement for operators qualifying to take certification examinations can be based on "cross-experience".

The revised regulation clarifies that at least 50 percent of the training units for certification renewal must be obtained from core training courses approved in the certification category being renewed. The remainder of the training units may consist of any combination of supplemental training units and/or training units approved as core training in other certification categories. The Board also has included language to prevent "double-counting" the training units from a single course. For example, if a course has been approved for 1.0 training units in each of the certification categories, an operator renewing a class A water treatment operator certification may count the 1.0 training unit toward renewal but may not also use cross-experience credit for the same course, even though it has been approved for training units in other certification categories.

C. Examination Feedback.

The Colorado operators certification statute previously required that each of the Board's nonprofit contractors "conducts failed exam reviews" following each certification examination cycle. This provision was amended in House Bill 04-1211, adopted by the 2004 session of the Colorado General Assembly, to provide that each contractor "provides feedback to examinees upon request following each examination". Subsection 100.11.5 has been revised to require that feedback regarding applicants' performance on the individual topics tested be provided to each person taking an operators certification examination. This new language goes beyond the revised statutory mandate, which only requires such feedback upon

request. However, the Board has provided in the regulation for the automatic provision of feedback to all examinees, since that is consistent with the contractors' current practice.

D. Specific Training Requirement for Operators Conducting Certain Quality Control Analyses

In order to maintain enforcement primacy under the Safe Drinking Water Act, the State must approve parties who are qualified to make and to assure the quality of certain analyses required by the Environmental Protection Agency ("EPA"). These requirements are detailed in the Colorado Primary Drinking Water Regulation, 5 CCR 1003-1, Article 7.5, "Disinfectant Residuals, Disinfection Byproducts, and Disinfection Byproduct Precursors." Colorado elected to approve certified operators as the parties approved by the State to perform these analyses.

To meet this requirement, the Board approved the original version of subsection 100.14.6 of Regulation 100 in May 2002. However, as originally adopted, the subsection was overly broad. The amendment approved by the Board in this rulemaking clarifies that subsection 100.14.6 applies only to those operators whose duties include performing the above-mentioned analyses and associated quality assurance procedures required by the article 7.5 of the Colorado Primary Drinking Water Regulation.

100.41 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE AND EMERGENCY FINDINGS: NOVEMBER 2004 RULEMAKING

Provisions of section 25-9-108, C.R.S., provide the specific statutory authority for the adoption of these amendments to the established regulatory provisions of Regulation 100 (5 CCR 1003-2). The Board also adopted, in compliance with section 24-4-103(4), C.R.S., the following statement of basis and purpose.

BASIS AND PURPOSE

The Board also adopted a new training unit course approval fee of \$50.00, to cover the cost of the contractors' review of training courses submitted through the new online review and approval system. The Board determined that it is appropriate for the costs of the training unit approval process to be covered by training providers. Establishing a reasonable fee for this service should also have the added benefit of discouraging submittal of training course approval applications for courses of marginal relevance or benefit to certified operators.

In order to address certain special circumstances, the Board has created three exceptions to the \$50.00 training unit approval fee. First, the Board intends that appropriate courses from accredited educational institutions in the United States, and equivalent institutions outside the United States, can be used for training unit credit for certification renewal without approval of the specific courses by the Board or its designee. However, some educational institutions may wish to have their courses listed with other approved training unit opportunities, which generally are posted on the web site of the Board and/or its designee. If an educational institution wishes to have its courses posted along with other approved training units, its courses will be subject to the usual \$50.00 fee and will be reviewed by the normal training unit review process.

The Board recognizes that in some instances an individual may take a course that provides relevant and appropriate operator training, but which has not been submitted by the course sponsor for training unit approval. For example, this could occur if an operator attends training at an out-of-state national conference that has not submitted its courses for approval in Colorado. To reduce the hardship on individuals seeking approval of such courses, the Board established a reduced fee of \$25.00 for applications for approval of a course submitted for review by an individual attending the course. To assure that this option is not used by course sponsors as an opportunity to avoid payment of the usual \$50.00 fee, the Board provided that any course submitted for approval by an individual attending a course will be approved only for that individual.

Finally, to account for other special circumstances that may arise, the Board established an opportunity for case-by-case waiver of the \$50.00 fee. The Board intends that its contractors may use this provision to avoid financial hardships and the potential unintended consequence of reducing training opportunities for Colorado operators. The Board assumes that this provision will apply infrequently.

The Board provided that the new training unit approval fee will apply to all courses approved for offering in 2005 and later. The Board understands that while some courses have already been submitted and reviewed for offering in 2005, course sponsors submitting such courses have been notified that final approval of such courses will not occur until finalization of this new fee. The Board determined that it is appropriate for all courses to be offered for calendar year 2005 and later to be subject to the same fee provisions, in order to provide for even-handed treatment. Therefore, the Board adopted the new training unit approval fee provisions on both an emergency and permanent basis.

EMERGENCY FINDINGS

On an emergency basis, the training unit course approval fee shall become effective November 30, 2004, and shall remain effective on an emergency basis until it becomes permanently effective on January 30, 2005 pursuant to section 24-4-103(5), C.R.S.. The Board further determined that this result is appropriate and should not result in hardship to course sponsors. This rulemaking was initiated in October 2004 after complying with the usual notice requirements. Possible approaches to the training unit approval fee were discussed at the October 2004 hearing and interested parties had an opportunity to discuss and comment on the proposal. In addition, December 30, 2004 would have been the normal effective date had final action been taken at the October 2004 hearing at the same time as the remainder of the proposed rule. Course sponsors have been aware of the intent to establish a new training unit approval fee for 2005 courses and relying on the usual effective date would now result in unequal treatment in favor of course sponsors that submitted applications for approval of 2005 courses prior to the effective date. Therefore, the Board finds that immediate adoption of these revisions to Regulation No. 100 is imperatively necessary to preserve public welfare and that compliance with the requirements of section 24-4-103(5), C.R.S. would be contrary to the public interest.

100.42 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE: JULY 26, 2005 RULEMAKING

The provisions of sections 25-9-104(3) and 25-9-104(4), C.R.S., provide the specific statutory authority for the adoption of these regulatory provisions. The Board also adopted, in compliance with section 24-4-103(4), C.R.S., the following statement of basis and purpose.

BASIS AND PURPOSE

The Board adopted revisions to the drinking water treatment facility classification system in section 100.4 of this regulation in order to more precisely define some classifications, to broaden classifications to include newer technologies, and to remove certain inconsistencies in the former classifications. The classification categories have been indexed for clarity.

Ground Water Systems: Subsections 100.4.2(a) through (c).

Subsection 100.4.2(a). The deletion of footnote #2 is reflective of the Board's recognition that a level "1" water distribution system operator should have sufficient knowledge and skill to supervise a small ground water system that operates with a waiver of disinfection.

Subsection 100.4.2(c). The Board clarified that treatment technologies other than what may be commonly connoted by the term "filtration" are encompassed by the regulation. The Board also recognized that chemical addition to improve the aesthetic quality of drinking water (secondary drinking water standards as listed in 40 CFR 143) ordinarily should not raise the classification of a system beyond

the “C” level. Ground water systems with treatment techniques or chemical additions, other than disinfection, that are used for the specific purpose of meeting primary drinking water requirements (40 CFR 141) should be classified under the criteria in subsection 100.4.2(g).

All Water Systems: Subsections 100.4.2(d) through (f).

Subsection 100.4.2(d). The Board intends that small, simple water systems that require filtration in addition to disinfection be classified a “D” systems only if the system utilizes disposable filters, i.e., filters that do not require periodic backwashing or other maintenance and which must be disposed of when they lose their effectiveness. The Board has determined that the type of disinfection utilized should not be restricted to non-gaseous chlorine and has deleted that qualifier from the regulation.

Subsection 100.4.2(e). The Board recognizes that the expertise required to operate water systems that use a variety of filtration and other treatment technologies (other than disposable filters or direct or conventional filtration) in order to meet primary drinking water standards is often equivalent to the skill required to operate water systems using the same techniques to improve the aesthetic quality of water. The classification of such systems is intended to be “C” for smaller systems. However, because of the enhanced public health risk in the case of system failure, the Board intends that the increase in classification level with size be accelerated for systems using filtration and other technologies to meet primary standards.

Subsection 100.4.2(f) Primary treatment techniques that incorporate or depend upon additional chemical treatment in order to function properly are intrinsically more complex to operate. An example of such a system would be a conventional filtration system, which ordinarily requires the additional steps of chemically aided coagulation and flocculation. The terms “conventional filtration” and “direct filtration” are defined in the Colorado Primary Drinking Water Regulations, articles 1.5.2(21) and 1.5.2(30), March 30, 2005, respectively. These definitions are intended to apply to Regulation 100, section 100.4.2(f). Such systems have significant monitoring, testing and adjustment requirements. The Board intends that systems utilizing any filtration technique or other treatment technology that, in and of itself, requires additional chemical treatment in order to meet primary drinking water requirements have an initial classification of “B”.

Chemical Addition: Subsections 100.4.2(g) through 100.4.2(i).

Subsection 100.4.2(g). Secondary drinking water standards have defined “secondary maximum contaminant levels”, SMCLs, which are non-enforceable (40 CFR 143). The Board intends that chemical addition for the specific purpose of meeting secondary drinking water standards, such as iron and manganese control, pH control, or water softening, should not affect the classification of a level “B” or “C” water system. Level “D” systems utilizing chemical addition for the specific purpose of meeting secondary drinking water standards should be individually evaluated under the authority of section 100.4.1 to determine the appropriate classification.

Subsection 100.4.2 (h). The Board intends that this classification category apply to systems that, in addition to the primary treatment process, utilize chemical treatment for the specific purpose of meeting the enforceable “maximum contaminant level” requirements for primary contaminants (40 CFR 141). An example of such a chemical treatment would be the use of lime softening for the specific purpose of controlling radionuclides. The Board also intends that disinfection is not to be considered as an “additional chemical treatment” within the meaning of Regulation 100, subsection 100.4.2(h).

Subsection 100.4.2(i). Although lead and copper are contaminants of special concern, they differ from most primary drinking water contaminants in that (1) they commonly occur in the distribution system, not in the source water; and (2) the methods of treatment for lead and copper are relatively non-complex. The Board, therefore, intends that systems that treat for lead and copper in the distribution system (a process commonly referred to as “corrosion control”) have a minimum classification of “C”. Should treatment be necessary because of the contamination of source water with lead and copper, a higher

classification may be appropriate. The Division should evaluate such systems to determine whether an application of section 100.4.1(b) is appropriate.

Subsection 100.4.2(j). The Board intends that any water system utilizing fluoridation have a minimum classification of “C”, hence the designation of chlorination as a companion process to fluoridation has been deleted.

Multiple Treatment Processes: Subsection 100.4.2.4.

Systems utilizing multiple water treatment processes should be classified in accordance with the most complex process regularly used. This regulation already contains a parallel requirement for domestic and industrial wastewater systems, sections 100.5.4 and 100.6.4, and the Board has determined that the requirement should be included as part of the drinking water classifications.

100.43 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE: FEBRUARY 14, 2006 RULEMAKING

The provisions of sections 25-9-104, C.R.S., provide the specific statutory authority for the adoption of these regulatory provisions. The Board also adopted, in compliance with section 24-4-103(4), C.R.S., the following statement of basis and purpose.

BASIS AND PURPOSE

The Board adopted revisions to a variety of provisions in this regulation in order to clarify the intent of certain provisions and to incorporate within the regulation the definitions of terms commonly used in the water and wastewater industries.

Definitions: Section 100.2.

Subsections 100.2(1), (7), and (9). The Board includes the definitions of “Bag or Cartridge Filters”, “Conventional Filtration Treatment”, and “Direct Filtration Treatment” in order to standardize the understanding of these treatment techniques as used in the water treatment facility classifications of subsection 100.4.2 of this regulation. The Board intends that these definitions be interpreted in a manner consistent with the Colorado Primary Drinking Water Regulation (5 C.C.R. 1003-1).

Subsection 100.2(17). The definition of “Plant Design Flow” is added to this regulation in order to clarify that the classification of a water or wastewater facility is to be based upon the capacity of the facility, as approved by the Division, and not upon the actual production of the facility.

Subsections 100.2(18) and (20). Definitions of “Primary Drinking Water Requirements” and “Secondary Drinking Water Standard” are included in order to remove the incorporation by reference of these terms in subsections 100.4.2(d),(e),(f),(g) and (h) of this regulation.

Subsection 100.2(23). The Board intends to clarify that the “Transient Non-Community” operator certification level, as described in subsection 100.19.2 of this regulation, covers only a specific subset of transient non-community public water systems.

Subsection 100.2(25). The Board intends that the term “validated examination”, as used in section 100.11 of this regulation, be interpreted in a manner consistent with the federal guidelines for facility operator certification examinations (Federal Register, Vol.64, No. 24; February 5, 1999.)

Water Facility Classification: Subsection 100.4.2

Subsections 100.4.2(d),(e),(f),(g) and (h). Cross-references to provisions of the Code of Federal Regulations are deleted by this amendment. The definitions of the previously cross-referenced terms are explicitly added to this regulation as subsections 100.2(18) and (20).

Subsection 100.4.2(k). The criterion for the classification of water vending machines is amended to be consistent with the terminology used in other facility classifications in section 100.4.2 of this regulation.

Qualifications and Classifications for Certification of Operators: Section 100.9

Subsections 100.9.2 and 100.9.3. The Board intends that a demonstration, by the applicant for a certification examination, of skills equivalent to the General Equivalency Diploma (GED) may be substituted for the requirement that an applicant hold either a high school diploma or a GED.

Subsections 100.9.4 and 100.9.8(a)(iv) and (b)(iv). The Board intends to clarify that once specific experience or education is used by an applicant to fulfill a requirement for certification, that same experience or education may not be used to meet any other requirement for the same certification.

Application for Certification: Section 100.10

Subsections 100.10.4, 5, and 6.

The Board intends to clarify the process by which an applicant may request a re-review of his or her application. All application denial notices should include the specific grounds upon which the application was denied. Such notices should include sufficient detail to allow the applicant to supply relevant supplementary information to the Board's designee in a timely manner.

The timeframes allowed for an applicant to request an application re-review or to request an appeal of an application denial are specified.

The Board intends that all material to be considered during a re-review or during an appeal must be submitted at the time of the request for re-review. Appeals to the Board will be evaluated based upon the material available during the re-review of the application. Material submitted after the re-review will not be considered by the Board at an appeal hearing, unless the operator provides a showing why such information could not have been submitted earlier in the process.

Education and Cross Experience Substituted for Experience Requirements: Section 100.12

Subsection 100.12.1(a). The Board intends to clarify that any education credit claimed as a substitute for experience must be post-secondary education. The Board intends that education obtained at institutions such as community colleges and post-secondary technical schools is acceptable.

Subsections 100.12.1(b) and (c). The Board intends to clarify that an approved and completed program, for which the applicant has received a diploma or certificate, is to be counted as a whole when used as a substitute for education. Experience equivalencies should be credited as specified in subsection 12.1(a). Only when an approved course of study has not been completed should the relevancy of individual courses be evaluated and a course-by-course determination of equivalency determined.

Certificates: Section 13

Subsection 100.13.7. The Board deleted this subsection as not necessary to this regulation.

Training Unit Requirements for Renewal of Certification: Section 100.14

Subsection 100.14.1. The Board recognizes that many training courses are approved for credit in multiple fields. While an operator may not count the same material twice toward the renewal of a single certification, the Board intends that operators be granted credit for the full time he or she attended a course. For example, a water treatment operator attends a six-hour course offering 0.4 Training Units (TUs) in water treatment and 0.6 training units in water distribution. For the renewal of a water treatment certification, the operator may count a total of 0.6 TUs for the course: 0.4 TUs may be counted toward the core requirement in water treatment and 0.2 TUs of the credit approved for water distribution may be counted as “outside the field” credit.

100.44 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE: APRIL 24, 2007 RULEMAKING; ADOPTED JULY 31, 2007; EFFECTIVE SEPTEMBER 30, 2007

The provisions of sections 25-9-104 and 25-9-108, C.R.S., provide the specific statutory authority for the adoption of these amendments to the established regulatory provisions of Regulation 100 (5 CCR 1003-2). The Board also adopted, in compliance with section 24-4-103(4), C.R.S., the following statement of basis and purpose.

BASIS AND PURPOSE

Subsections 100.9.2 and 100.9.3. It is the intention of the Board to reflect the intent of the Environmental Protection Agency (EPA) regarding the substitution of education and/or experience for the general prerequisite that a high school diploma or general equivalency diploma (GED) be held by all candidates for certification. EPA intends that candidates not meeting this prerequisite have education and/or experience beyond that which is required of other candidates. The Board has amended subsections 100.9.2 and 100.9.3 to clarify that (1) the GED is the only automatically acceptable alternative to a high school diploma and that (2) for candidates lacking a high school diploma or GED, there will be an additional experience and education requirement in order to qualify for examination. The choice of a six month period of additional experience is intended to reflect the experience equivalent of a full semester of academic credit as described in section 100.12.1(a) of this regulation.

Subsections 100.12.1(b)(i) and 100.12.1(c). While recognizing the value of all post-secondary education, the Board has revised these sections of the regulation to provide that programs or courses acceptable as a year-for-year substitute for up to 50% of the direct experience requirements of this regulation be limited to those that the Board has determined are directly relevant to the operation of water and wastewater facilities. The previous version of Regulation No. 100 allowed any “technically oriented” courses or programs to substitute for up to 50% of the experience requirement. Addition of the “directly relevant” language reflects the Board’s intent to be more specific with respect to the types of programs or courses that may receive credit. The Board has adopted language from an ABC report on operator certification program standards to provide examples of the types of courses or programs that would be considered “directly relevant”. The Board intends that its contractors will apply this provision in the first instance, subject to appeal and final determination by the Board.

Subsection 100.12.1(b)(ii). Although a degree that does not meet the criteria of section 100.12.1(b)(i) does not provide the specific background skills for entry into the water and wastewater professions, the Board recognizes that applicants who have completed a post-secondary degree program have demonstrated a set of learning abilities which should enable them to more efficiently acquire many of the skills normally developed by hands-on experience. The Board has determined, therefore, that a 25% education credit toward meeting the experience requirement is appropriate for applicants holding post-secondary degrees, regardless of the fields in which the degrees are granted.

Subsection 100.13.8. This section is deleted as duplicative of subsection 100.13.7.

Subsection 100.22.2. The Board has revised subsection 100.22.2 to modify the examination and administration fees. The previous \$35.00 examination fee is inadequate to cover the actual cost of certification exams provided by ABC, including preparation and administration of those exams.

Additionally, the previous administration fee of \$50.00 is inadequate to cover the costs incurred in maintaining the database of operators, issuing and mailing certificates and other correspondence. The Board agrees with the CECTI and Certification Council proposal that it is more appropriate to increase the examination fee (to \$45.00) and to increase the administration fee (to \$55.00) for those obtaining a new certification by examination. The net result will be an increase of \$15.00 in total fees for those passing a certification examination to obtain a new certification at a higher level. Those who take an examination and fail will incur a \$10.00 increase.

The Board also agrees that it is appropriate to increase the administration fees at this time for those obtaining renewal certifications or certification by reciprocity from \$60.00 to \$70.00 to cover administrative costs. The Board also determined that it is appropriate to add a \$20.00 fee to cover the cost of providing replacement certification documentation.

Water Distribution and Wastewater Collection Classifications

A. Operator Certification Levels

The Board has revised subsection 100.9.7 to include a level 3 certification requiring 3 years experience. Further, the Board has agreed to recognize current Class 3 operators as Class 4 operators and authorizes the issuance of operator certificates reflecting Class 4 certification. The Board has determined that this is appropriate, based on the four-year experience requirement previously in place for Class 3 operators and based on the content of the previous Class 3 examinations. Any current restricted Class 3 collection and distribution certification would become a restricted Class 4 certification.

B. System Classifications

The Board has revised subsections 100.7.2 and 100.8.1 to modify the current Water Distribution and Wastewater Collection Systems classification tables to address the complexity of very large systems. Class 3 systems will be changed from serving populations greater than 25,000 to serving populations from 25,001 to 100,000. The Board has added a Class 4 classification that serves populations greater than 100,000.

Corresponding revisions have been adopted for sections 100.14 and 100.21.

100.45 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE: APRIL 28, 2009 RULEMAKING; ADOPTED APRIL 28, 2009; EFFECTIVE JUNE 30, 2009

The provisions of section 25-9-104(4), C.R.S. (2008), provide the specific statutory authority for the adoption of these amendments to the established regulatory provisions of Regulation 100 (5 CCR 1003-2). The Board also adopted, in compliance with section 24-4-103(4), C.R.S., the following statement of basis and purpose.

BASIS AND PURPOSE

Subsection 100.2(12). The Board added a definition of "Responsible Person" that sets requirements for persons charged with the responsibility for supervising Class 2 industrial wastewater operations and for ensuring compliance with the facility's discharge permit requirements. The Board intends that such persons receive adequate and ongoing training in areas relevant to their responsibilities, such as specific measures used to meet effluent limits, monitoring, inspection, planning, reporting, and documentation requirements.

Subsection 100.2(18). The Board adopted a definition of "Passive Wastewater Treatment" that parallels the statutory language of section 25-9-104(4)(d), C.R.S.

Subsection 100.6.1. The Board adopted this amendment to Regulation 100 to implement the provisions of section 25-9-104(4), C.R.S., as amended by the Colorado General Assembly in 2008. The Board recognizes that there are wastewater treatment activities in Colorado that require only passive treatment in order to meet Colorado Discharge Permit System (“CDPS”) effluent limitations. The Board also recognizes that many of these activities are currently managed under a variety of Best Management Practice (“BMP”) requirements. Additionally, the Board recognizes that it is current practice in many of these industrial activities to place the facility/activity under the supervision of an environmental professional responsible for effluent quality, for overseeing monitoring, and for ensuring timely and accurate discharge monitoring reporting.

In light of the above considerations, the Board divided permitted industrial wastewater facilities into two distinct classes. Class 2 facilities shall not be subject to the requirements to operate under the supervision of a certified operator. The Board maintained the requirement for all industrial wastewater facilities not classified as class 2 facilities to remain subject to the requirements of Regulation 100 to operate under the supervision of a certified operator and designated these facilities as class 1 facilities.

Subsection 100.6.1(b)(i). The Board has determined that facilities/activities which discharge solely under the authority of stormwater permits shall be classified as class 2 facilities without the need for specific Board action other than the adoption of this amendment to Regulation 100. The Board recognizes that such facilities utilize only passive treatment or no treatment of stormwater and are subject to significant requirements, including the filing of and adherence to Stormwater Management Plans. The Board has determined that facilities subject to stormwater discharge permits are appropriately classified as class 2 pursuant to the criteria in section 25-9-104(4) C.R.S. since these discharges generally do not contain substantial concentrations of toxic pollutants and do not require chemical, mechanical, or biological treatment. The Board intends that the designation as class 2 shall include facilities discharging under the authority of municipal stormwater permits, industrial stormwater permits and construction stormwater permits. The Board does not grant automatic class 2 classification to facilities discharging under the authority of combined process water and stormwater permits.

The Board has further determined that facilities/activities discharging pursuant to the Water Quality Control Division’s “Low Risk Discharge Policy” shall be classified as class 2 facilities. The Board recognizes that the discharge from such activities is considered to pose minimal risk of environmental degradation. Such discharges generally do not contain substantial concentrations of toxic pollutants and do not require chemical, mechanical, or biological treatment. The Board further recognizes that water distribution systems holding “Treated Water Distribution System” permits are already required to be under the direct supervision of certified water distribution system operators whose training and certification criteria include the handling of the type of discharges covered under these permits. Similarly, water treatment facilities holding “Water Treatment Plant Discharge” permits are already required to be under the direct supervision of certified water treatment operators whose training and certification criteria include the handling of the type of discharges covered under these permits.

Subsection 100.6.1(b)(ii). The Board recognizes that there are additional CDPS general industrial discharge permits whose effluent requirements can ordinarily be met by utilizing, at most, passive treatment techniques. These general industrial permits are listed within the amendment in subsection 100.6.1(b)(ii). The Board has provided that facilities holding these discharge permits shall be recognized as class 2 facilities based upon the Water Quality Control Division’s verification of a facility’s written certification that effluent limitations can be met utilizing only passive treatment and that the facility is under the supervision of a responsible person as defined in subsection 100.2(21) of this regulation. Verification by the Division will serve to confirm that a facility qualifies as a class 2 facility consistent with the classification determinations made by the Board in revisions to Regulation 100. The Board intends that the Division retain a record of such classifications. The Board recognizes that facilities denied a class 2 classification may appeal the Division’s determination to the Board pursuant to section 100.24 of this regulation.

Subsection 100.6.1(b)(iii). The Board further recognizes that certain facilities are required to hold individual industrial discharge permits rather than general industrial discharge permits. Individual permits are usually required either because of the sensitivity of the receiving waters, the nature of the effluent, or the complexity of the treatment required in order to meet effluent limitations. The Board has reserved to itself the authority to grant a class 2 classification to such facilities. The Board has provided that such facilities may submit a request for reclassification to the Board. This request shall include a demonstration that the facility's operations meet the applicable considerations of section 25-9-104(4), C.R.S.; that effluent limitations can be met utilizing only passive treatment; and that the facility is under the supervision of a responsible person as defined in subsection 100.2(21) of this regulation. The Board will forward the material submitted with the request to the Division for evaluation and recommendation. The Board will approve or deny such requests at an adjudicatory hearing at a regular Board meeting.

The Board recognizes that there are certain general industrial permits that authorize discharges from types of activities which are inherently more complex than those described in section 100.6.1(b)(ii) above. It is the Board's intention that facilities discharging under the authority of general permits other than those listed in subsection 100.6.1(b)(ii) should follow the reclassification procedure outlined for facilities holding individual industrial discharge permits.

Conditions Applicable to Subsections 100.6.1(b)(2) and 100.6.1(b)(iii). In order to ensure that facilities meet the requirements for class 2 classification on a continuing basis, the Board has provided that each facility classified as a class 2 facility under subsection 100.6.1(b)(ii) or subsection 100.6.1(b)(iii) shall submit an annual certification confirming that the conditions under which its classification was granted are still being met and that ongoing annual training has been provided to the designated responsible person. The Board does not intend that a detailed accounting of the nature or timing of such training be submitted with each annual certification.

The Board may reclassify a class 2 facility to class 1 if that facility fails to meet 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.

100.46 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE:
SEPTEMBER 29, 2009 RULEMAKING; ADOPTED SEPTEMBER 29, 2009; EFFECTIVE
NOVEMBER 30, 2009

The provisions of section 25-9-107, C.R.S., provide the specific statutory authority for the adoption of these amendments to the established regulatory provisions of Regulation 100 (5 CCR 1003-2). The Board also adopted, in compliance with section 24-4-103(4), C.R.S., the following statement of basis and purpose.

BASIS AND PURPOSE

Subsection 100.6.1. The Board added subsection 100.6.1 in April 2009 to implement the provisions of section 25-9-104(4), C.R.S., as amended by the General Assembly in 2008. The Office of Legislative Legal Services, which conducts legal reviews of all newly-promulgated agency rules, subsequently expressed concerns regarding the apparent "incorporation by reference" of the Division's Low Risk Discharge Policy in subsection 100.6.1(b)(i)(B). Based on these concerns, the Board decided as part of this rulemaking proceeding to delete subsection 100.6.1(b)(i)(B) (and to re-number the subsection accordingly).

The Board's initial intent in referencing the Division's Policy was to categorically exempt such facilities from the certified operator requirement because of their low risk of impacting the quality of state waters. The Board and the Division have agreed that the Board's intent can be accomplished alternatively through language in the Division's Low Risk Discharge Policy itself. Thus, the Low Risk Discharge Policy will soon be amended to state that the Division will use its enforcement discretion with respect to facilities which do not have a certified operator, where such facilities can prove that they are discharging pursuant

to the Policy and implementing the best management practices outlined in the related guidance documents.

Subsection 100.13. The Board recognizes that section 25-9-107, C.R.S., refers to the “award” of a certificate, that certificates shall be “awarded for a period of three years”, and that the timing of automatic revocation for non-renewal is referenced to the “expiration date” of the certificate. Earlier versions of this regulation, however, reference the date of automatic revocation of a certificate to the “issue” date. Because certificates may not always be issued exactly three years prior to the expiration date, this difference in language is significant.

The Board has, therefore, chosen to align the language of subsection 100.13 of this regulation more closely with the language of the governing statute and refer the three year validity period of all certificates either to the date of “award” (for new certificates) or to the date of expiration of the previous certificate (for renewed certificates). It is clarified that renewed certificates are valid for three years from the date of expiration of the certificate being renewed and not from the date of issue of the renewal certificate.

The Board further determined to adopt language which clarifies that the date of issue of a certificate does not determine the date on which a non-renewed certificate is automatically revoked. The Board intends to clarify that certificates shall be automatically revoked if not renewed within two years of the expiration of the certificate.

100.47 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE: NOVEMBER 2009 RULEMAKING; ADOPTED NOVEMBER 24, 2009; EFFECTIVE JANUARY 30, 2010

Provisions of section 25-9-108, C.R.S., provide the specific statutory authority for the adoption of these amendments to the established regulatory provisions of Regulation 100 (5 CCR 1003-2). The Board also adopted, in compliance with section 24-4-103(4), C.R.S., the following statement of basis and purpose.

BASIS AND PURPOSE

A. New and Revised Fees.

The Board has revised section 100.22.2 to modify the current examination fees by establishing a \$35.00 fee for online testing. Examination fees currently cover the costs associated with certification when certification examinations are taken in a written format during the regularly scheduled examination periods. Recent advances in technology have now made it possible to offer certification examinations in an electronic format. While this technology offers advantages in the form of convenience, enhanced security and immediate results, there are added costs associated with this form of testing. These costs include added cost for the setup and maintenance of the electronic testing system and the cost of administering and staffing an examination facility. The Board concludes that since electronic testing is an option offered for the convenience of the applicant, the added costs associated with this form of testing should be met by the assessment of a fee specific to electronic examinations and should not be met by an increase in the existing examination fee.

B. Other Revisions

The Board has also revised sections 100.9.6, 100.9.8, 100.11.1, 100.11.3, and 100.13.8 to modify references to “written examinations” in order to accommodate electronic testing.

100.48 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE: NOVEMBER 2011 RULEMAKING ADOPTED NOVEMBER 29, 2011; EFFECTIVE JANUARY 30, 2012

Provisions of section 25-9-108, C.R.S., provide the specific statutory authority for the adoption of these amendments to the established regulatory provisions of Regulation 100 (5 CCR 1003-2). The Board also adopted, in compliance with section 24-4-103(4), C.R.S., the following statement of basis and purpose.

BASIS AND PURPOSE

The Board determined that it was necessary to revise Regulation 100 to reflect a change in its testing policy which, before this hearing, consisted of requiring operators to take standard "multiple entry" exams to acquire certification for the various classes within the certification categories. The material on such exams covers the lower levels or classes within a certification category up to the certification level sought. The Board is now changing to a "sequential" testing scheme; each test focuses on the material for a particular class/level of certification within each certification category. Operators will now be required to hold a certification in the class immediately below the class for which the application is being made, and thus the operators will not be able to "skip" any classes of certification in progressing to the higher classes. The Board has determined that it is prudent to make this change in policy for the following reasons.

The Board agrees with recent findings by the Association of Boards of Certification (ABC) that there are certain deficiencies with the multiple entry exam approach. For example, operators who passed the Class 4 Distribution exam by doing very well with the lower level exam questions could actually do very poorly on the questions specific to Class 4. This indicates that the multiple entry approach may not provide an accurate indication of proficiency in the skills required of a Class 4 Distribution operator. For this reason, ABC is no longer developing standardized multiple entry exams for their clients.

Additionally, the Board was persuaded by the results of an analysis by a psychometrician hired by its Contractors to evaluate knowledge required of Colorado's operators for the various certification categories and the classes within each. Exam blue prints have been developed which support the use of sequential testing because some areas of knowledge are tested more thoroughly at a lower level than at an upper level. The Board also considered the issue of reciprocity, as there will be very few, if any, states using multiple entry exams by the end of 2011. The Contractors' reciprocity committees will benefit from a sequential testing scheme because it will allow an equal comparison of Colorado's testing requirements with those of other states.

Accordingly, the Board added new section 100.9.7 to include the new requirement that in order to qualify to sit for an exam, an applicant must hold a certification for the same category and in the class immediately below the class for which the application is being made. The Board also revised the corresponding "Prior Certification and Experience Requirements" table in section 100.9.8 to consolidate and simplify the explanation of the experience requirements for the various certification categories and classes within each. Minor revisions were also made to section 100.9.6 for consistency with the other changes.

The Board agrees with the Contractors' assessment that relatively few operators will be impacted by this change in testing policy, as most operators already gain the required experience and take examinations with the intent to advance sequentially through a particular certification category. For those few operators who currently have the requisite experience to bypass lower level exams and may wish to skip to higher class of certification, they should be able to obtain their desired level of certification in an expeditious manner. The Contractors have indicated to the Board that, beginning in 2012, they will be expanding from their current offering of two examination cycles per year to three cycles. This added exam cycle will allow operators who meet higher level experience requirements to go through the sequential testing process more quickly in order to obtain their desired level of certification.

100.49 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE: FEBRUARY 2012 RULEMAKING; ADOPTED APRIL 24, 2012; EFFECTIVE JUNE 30, 2012

Provisions of section 25-9-108, C.R.S., provide the specific statutory authority for the adoption of these amendments to the established regulatory provisions of Regulation 100 (5 CCR 1003-2). The Board also adopted, in compliance with section 24-4-103(4), C.R.S., the following statement of basis and purpose.

BASIS AND PURPOSE

The Board determined that it is necessary to revise Regulation 100 to reflect the following changes:

Generally, the Board added clarifications where appropriate, deleted obsolete language, corrected referenced citations, and made grammatical corrections. Stylistic changes throughout the text of the regulation were made for uniformity and clarity. Where possible, the Board reorganized and combined like requirements into unified sections, i.e., section 100.9.9 describing the special rules for satisfying the minimum experience requirements for Class D, Class 1, Class S and Class T certifications. Because the minimum experience requirement is the same for all three classes, sections 100.9.9(a), 100.9.9(b), and 100.9.6 have been combined into 100.9.9.

Section 100.1. For consistency with other Department regulations, the Board added reference to the specific statutory authority of the Board to promulgate regulations.

Section 100.2. The Board added definitions for the “Colorado Discharge Permit System Regulation” and the “Colorado Primary Drinking Water Regulations;” modified the definition for “public water system” to be consistent with the definition in the “Colorado Primary Drinking Water Regulations;” deleted language in the definition of “operator” that was redundant with the section of the regulation pertaining to certified operator duties; deleted the definition for “small system” because this classification was renamed “Class S” in this rulemaking; deleted the definition for “transient non-community certification” because this term is no longer used; and modified the definition of “water treatment facility” to match the statutory definition, 25-9-102(7), C.R.S.

Sections 100.4.1, 100.5.1, 100.7.1 and 100.8.1. The Board recognizes the confusion resulting from the use of like terms, specifically: 1) transient non-community water system, transient non-community water system operators certification, and transient non-community water system facility classification; and 2) small system under the Colorado Primary Drinking Water Regulations, small water system operators certification, small wastewater system operators certification, small water system facility classification and small wastewater facility classification. Because transient non-community water systems, small water systems, and small wastewater systems are subcategories of Class D water or wastewater treatment facilities with a Class 1 water distribution or wastewater collection system rather than distinct facility classifications, they have been removed as facility types.

Accordingly, the Board revised sections 100.4.1, 100.5.1, 100.7.1, and 100.8.1 to remove references to transient non-community system, small water system, and small wastewater system from the respective lists of facility classifications, and corrected the number of facility classification types in each section; and the sentence preceding the table in section 100.7.2 referencing small water system and transient non-community water system facility classifications was also deleted.

For clarity, the Board also changed the names of the following operator certifications: transient non-community systems to “Class T,” small water system to “Class S,” and small wastewater system to “Class S.” Sections 100.9.2 (d), (e), and (f), containing requirements for certification by examination, define when Class T and Class S certifications are valid to operate a Class D/Class 1 facility.

Section 100.6. The Colorado Discharge Permit System is a self-reporting program, and the Board recognizes that large numbers of the permits issued to facilities that meet the requirements for the Class 2 industrial facility exemption under Regulation 100 are never used or are effective for only short periods of time. The Board also recognizes the inability of the Division to verify on an annual basis each facility’s certification that it meets the requirements for the Class 2 industrial facility exemption.

Accordingly, the Board simplified the exemption process for Class 2 industrial facilities to reduce the regulatory reporting burden on the Division and on businesses operating within the State. A provision requiring facilities to notify the Division when they no longer meet the requirements of the exemption was added to ensure timely transition to operation under the supervision of a certified operator. The Board also added the new general "Pesticides" permit to section 100.6.1(b)(i)(C), and removed the specific industrial general permit numbers to prevent the need to modify the regulation each time the Division discontinues or adds to the permit numbering schema for the identified activity types.

Section 100.9, 100.10, 100.11, 100.12, 100.13, 100.14, 100.15, 100.16, 100.20, 100.21. The Board added language to clarify and to incorporate language from its policies and procedures regarding the following topics: certification requirements; minimum education and experience requirements; criteria for evaluation of experience; application procedures; substitution for the experience requirements; approval of training units, educational courses, and institutions; procedures for purchase of new certificates, renewal of certificates, and certificates by reciprocity; training unit requirements for renewal of certification; expired certificates; duties of certified operators duties of operators in responsible charge; facility owners' responsibilities, including the role of contract operators; and disciplinary actions, including clarified terminology and procedures.

Section 100.9.3 and 100.13.1. The Board recognizes the issues many small facilities face in ensuring they have trained certified operators. The Board also recognizes that the certified operator profession has an aging work force, and wishes to encourage dedicated young people to enter the profession. Accordingly, the Board added specific language regarding the examination and certification requirements for applicants participating in an approved high school program to encourage them to enter the water and wastewater fields. Specifically, the revised language allows a student to sit for an entry level certification examination prior to graduation from high school, with the provision that the certification will only be issued when the examinee successfully passes the examination and submits proof of graduation.

Section 100.13.1 The Board added a deadline of three years from the date of notification of certification eligibility to apply for the certificate. It is the Board's intention that after the three year deadline has expired, an individual would need to re-apply and retake the examination.

Section 100.13.5(a). The Board added the requirement that in order to obtain a certificate by reciprocity, persons passing exams in other states, territories, or countries must also acquire qualifying experience in the state, territory, or country in which they obtained their certificate. The Board wishes to maintain Colorado's high standards for operator certification, and this requirement is intended to deter persons (particularly Colorado-based operators) from taking certification exams in other states, territories, or countries as a means to more easily obtain a Colorado certification. The Board currently requires that exams taken in other states by reciprocity applicants must be adequate, validated, and "of a standard not lower" than Colorado's. The Board believes, however, that this additional requirement will help streamline the reciprocity process and make it less subjective in situations where an applicant could have taken an exam in Colorado, but instead chose to take it elsewhere with the intent to find a less challenging exam.

Section 100.14.2. For ease of reference, the Board consolidated the training unit requirements that were previously listed in narrative in this subsection into a table.

Section 100.18. The Board added the responsibility for a facility owner to ensure the employment agreement with a certified operator reflects the requirements of an operator in responsible charge. The Board also defined the decisions reserved to the operator in responsible charge and modified the reporting requirements of facility owners.

Section 100.18.5. For consistency with other changes in the regulation, references to Class S and Class T were added to the table regarding criteria for operators in responsible charge.

Section 100.19. In provisions regarding administration fees, the Board clarified that there is no additional fee for a standard 6 x 9 inch certificate, but that an additional fee of \$5.00 will be charged for operators

who opt for a larger size of certificate. Operators have had this option since 2008, but the Board believes it is appropriate to formalize this practice through its Regulations. The Board determined that the additional fee is necessary to cover postage and other incidental administrative costs associated with the larger certificate. The Board also added a \$50 late fee for purchases of certificates 61 or more days after the date of the letter notifying the applicant of eligibility to receive certification and for renewal of a certificate after the expiration date. The Board found that the \$50 amount is necessary and appropriate to cover administrative costs associated with delays in application for certification or certification renewal.

Section 100.21. For consistency with other Department regulations, the Board defined a timely appeal to the Board as submitting the request for hearing within thirty (30) days of notice of a decision by the Board's designee or the Division.

Section 100.25. This section regarding "Transitional Renewal Training Unit Requirements" was removed as obsolete.

The Board postponed the adoption of proposed sections 100.16.3(g), 100.16.3(h) and 100.16.4(a)-(f) regarding requirements for delegation of duties to uncertified personnel until a later rulemaking to allow time for additional stakeholder input.

100.50 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE: APRIL 29, 2014 RULEMAKING ADOPTED AUGUST 26, 2014; EFFECTIVE OCTOBER 30, 2014

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 (5 CCR 1003-2). The Board also adopted, 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 April 29, 2014. After receiving testimony from the Division, CECTI, and members of the public, the Board voted to continue the hearing until its August meeting with direction to the Division to work with stakeholders in developing a revised proposal regarding the definitions of "certified operator" and the associated terminology. At the hearing in August, the Board adopted the Division's revised proposal regarding the certified operator terminology, which was discussed and agreed to by the various stakeholders. As discussed in more detail below, the Board determined that the Division's revised proposal helps to clarify the roles of "operators," "certified operators," and "certified operators in responsible charge," while maintaining consistency with the statutory definition of "certified operator." The Board further determined that it was necessary to revise Regulation 100 as follows:

Generally, the Board added clarifications where appropriate, deleted obsolete and redundant language, corrected referenced citations, and made grammatical corrections. Stylistic changes throughout the text of the regulation were made for uniformity and clarity. Where possible, the Board reorganized and combined like requirements into unified sections. Additionally, there were many instances where the term "certification" was used when the reference was more accurately referring to a "certificate." In those instances, "certification" was changed to accurately refer to a "certificate."

Section 100.1.1. The Board revised the statutory citation to match current practice.

Section 100.2. The Board revised the term "certified operator" to be consistent with the common understanding of this term within the profession. Accordingly, the Board now defines this term as including all operators in Colorado who hold a Certified Water Professional ("CWP") certificate. To accomplish this, within its definition of "certified operator," the Board revised its interpretation of an operator's having "responsibility for the operation" of a facility. The Board's previous interpretation referred only to those operators who were in charge of making process control and/or system integrity decisions that may affect public health or the environment. The revision construes the term more broadly

to include all CWP's who, by virtue of holding a certificate, are qualified to perform various operational responsibilities at a facility.

The previous term "operator in responsible charge" was deleted and replaced with "certified operator in responsible charge." The Board determined that the new term was more appropriate to reflect the status of such operators. Within the definition, the Board clarified that "certified operators in responsible charge" have a higher level of responsibility at facilities because they are in charge of making process control/and or system integrity decisions that may affect public health or the environment. The Board also clarified its endorsement of the long-standing practice that facility owners may designate more than one person as the certified operator in responsible charge.

Finally, the definition of "operator" was revised to indicate that it is a general term that includes persons who may or may not hold a CWP certificate, and to delete the unnecessary word "supervises" to alleviate any confusion as to the general responsibilities or qualifications of an "operator." The Board made revisions to terminology throughout the regulation to be consistent with these changes to the definitions of "certified operator," "certified operator in responsible charge," and "operator."

Additionally, the Board moved definitions that are only used once in the regulation to the section of the regulation where the term is used. The definitions of "Board," "certificate," "department, and "domestic wastewater treatment facility" were changed to match the statutory definitions, and clarifying language was added to the term "training unit." The Board removed the definitions of "community water system," "non-transient community water system," and "non-community water system" because these terms are not specific to Regulation 100, and they are defined in the Colorado Primary Drinking Water Regulations, 5 CCR 1002-11.

Section 100.4. The Board removed as unnecessary the terms "community," "non-transient community," and "transient non-community" water systems in the section 100.4.2 table heading. In accordance with authority granted in § 25-9-104.4(2), C.R.S., the Board added section 100.4.5, which exempts water treatment facilities that are not public water systems subject to the Colorado Primary Drinking Water Regulations.

Section 100.6. The Board combined the stormwater permitted facilities with other facilities discharging under listed general industrial permits, requiring these facilities to meet the conditions for classification as Class 2 industrial facilities. With changes to the stormwater permit discharge limits, there is the possibility a facility may install active treatment to meet permit discharge limits. This change ensures that if that were to occur, the facility would be required to operate under the direct supervision of a certified operator in responsible charge.

Section 100.7.5. The Board added a provision that exempts water distribution facilities that fall within the jurisdiction of the "Water Well Construction and Pump Installation Contractors Act," 37-91-101 C.R.S. This provision was moved into the regulation from the Board's "De Minimus Distribution Systems" policy (July 20, 2003).

Section 100.9. The Board added the minimum passing score to the requirements for certification. The Board changed the minimum passing score for certification by examination to 70 percent at the April 2004 meeting. This decision is being incorporated in the regulation for clarity and transparency of the Board's expectations.

To improve the alignment of like provisions, the Board moved the provisions regarding restrictions on Class T and Class S Water and Wastewater certifications from section 100.9.2 (d), (e), and (f) to section 100.18.5(c), (d), and (f), which defines the minimum certification levels necessary for certified operators in responsible charge for each facility classification. Persons holding Class T and Class S certificates may serve as a certified operator in responsible charge only when all of the criteria in the relevant sections is met.

The Board made changes to the wording to increase clarity and readability. In addition, redundant language in section 100.9.9(c) was removed regarding the special rules for satisfying the minimum experience requirement for entry level certification in order to simplify the section.

Sections 100.10 and 100.11. For consistency, the Board changed the word “type” to “category” in sections 100.10.7 and 100.11.6. In addition, the terms “small water system” and “small wastewater system” were corrected in section 100.10.7 to be consistent with changes to the certificate names made in 2012. Class T was added to the list.

Section 100.13.1(a)(iii) and section 100.13.6. To ensure the Board has the most accurate operator contact information, the Board added the requirements to provide current contact information when applying for a new certificate and to update the Board upon a change to the contact information within 30 days of such a change.

Sections 100.13(e) and 100.16. The Board added language to clarify its expectations and to incorporate language from its policies and procedures regarding the following topics: renewal process for operators absent due to military service, delegation of tasks or activities, and duties of certified operators in responsible charge. These include the following Board policies: Policy 13-2 (USERRA), “Delegation of Tasks to Uncertified Personnel,” approved September 24, 2002, and “Interpretation of Operator in Responsible Charge Duties,” approved June 26, 2001.

Section 100.13.5(a)(i). The Board broadened the list of certifying authorities for applicants seeking to obtain a certificate by reciprocity by adding the general term “another certifying entity”. This revision gives the Board discretion to consider certificates awarded by national or international water or wastewater professional organizations, such as the Association of Boards of Certification (of which the Board is a member), which offers professional certification for water and wastewater facility operators. The Board recognizes that this type of certification should be recognized and taken into account when evaluating an operator who applies for a certificate by reciprocity.

Section 100.15.6 and 100.20.1. The Board added the requirement for certified operators to conduct themselves in a professional manner when acting in the capacity of an operator, and included failure to do so to the list of offenses that may result in a Board disciplinary action. The Board made this addition to clarify its expectations with respect to a certified operator’s obligation to uphold the integrity of the CWP profession while acting in such capacity.

Section 100.18.2 and 100.18.3. The Board clarified for facility owners its expectation regarding who may make process control decisions and who must be available to make those decisions. This change is consistent with section 100.30 (Statement of Basis and Purpose November 2000), which states: “In order to meet EPA guidelines, the Board required that all process control and/or system integrity decisions about water quality or quantity that may affect the public health or the environment be made by either an operator in responsible charge or another certified operator. This operator must be certified at a level equal to or higher than that of the facility.”

100.51 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE: JUNE 30, 2015 RULEMAKING; EFFECTIVE AUGUST 30, 2015

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 June 30, 2015. 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.

Based on the input received from stakeholders, no changes to the provisions regarding experience requirements of section 100.9.4 are being made at this time.

Section 100.2(11). The board added the definition for owner. Not all suppliers of water, permittees and co-permittees are the owners of the physical facilities. Defining owner in regards to Regulation 100 clarifies who is responsible for ensuring the facility is under the direct supervision of a certified operator in responsible charge when it is operating as required by section 100.18.1.

Sections 100.10. For clarification, the board changed the title and provisions of section 100.10 to clearly reflect that this section refers to the first of the two-step process of certification, to apply to sit for a certification examination.

Section 100.13. To ensure consistency, provisions of Regulation 100 that refer to the issuing of the certificate, payment of program fees and the period each certificate is valid were moved to section 100.13 "Introduction." For transparency, the board added the requirements to comply with section 24-76.5-101 et seq., C.R.S., often referred to as the lawful presence legislation when applying for new or renewed certificates.

Section 100.13.1, 100.13.2 and 100.13.5. For clarification, the board changed the headings and provisions of these three sections to clearly reflect they refer to the second of the two-step process of certification, the requirement to submit application for new or renewed certificates or to obtain certification by reciprocity.

Section 100.15.3. In August 2014, the board adopted revisions to section 100.20.1(j) to clarify that the board may take disciplinary action for failure to conduct oneself in a professional manner. In this proceeding, the board also adopted section 100.15.3 to include in the list of certified operators' duties the requirement to act in a professional manner. The board made this addition to clarify its expectations with respect to a certified operator's obligation to uphold the integrity of the CWP profession while acting in such capacity.

Section 100.16.5. The board removed responsibility from the certified operator in responsible charge duties for the management, administration, compliance with regulatory and permit requirements, and other responsibilities that require decision-maker action and approval, such as providing operational, technical and financial resources necessary for proper operation and maintenance of the water or wastewater facility. These responsibilities are implicitly and explicitly identified in other applicable regulatory and permit requirements as belonging to the owner of the facility. The board wanted it clearly understood that the certified operator in responsible charge is responsible for the professional operation and maintenance of the facility as appropriate to their certification level and working with the resources provided by the owner.

Section 100.18.1(a) and (b). For consistency and clarity, the board combined these provisions so the definition for direct supervision immediately follows the requirement for direct supervision by a certified operator in responsible charge.

Section 100.18.1 (b). The board defined how an owner designates the certified operator in responsible charge.

Section 100.18.3(a) and (b). For consistency and clarity, the board combined these provisions so the definition for available immediately follows the requirement for a certified operator in responsible charge to be available to make decisions and initiate actions that are reserved to the certified operator in responsible charge.

Section 100.18.4. For clarity, the board defined how an owner reports changes to the certified operator in responsible charge to the division. The division requires that current update forms be used. In addition, the board removed reference to certified operators in responsible charge being employed or contracted by the owner from sections 100.18.4 (b) and (c). There are other relationships that may exist between the owner and certified operators in responsible charge.

100.52 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE: DECEMBER 9, 2015 RULEMAKING, EFFECTIVE JANUARY 30, 2016

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

Sections 100.15.3 and 100.20.1(j). The board added subsection 100.20.1(j) in August 2014 to clarify that the board may take disciplinary action against a certified operator for failure to conduct oneself in a “professional manner.” In August 2015, the board adopted section 100.15.3 to include in the list of certified operators’ duties the requirement to act in a professional manner. The board made these additions to clarify its expectation that certified operators have an obligation to uphold the integrity of the profession by working with the public, others in the regulated community, and regulators in a dignified manner that fosters trust and respect. The board believes this obligation is important because the profession is directly linked to the important duties of protecting public health and the environment.

The Office of Legislative Legal Services, which conducts legal reviews of all newly-promulgated agency rules, expressed concern after the August 2015 adoption of section 100.15.3 that the language describing “professional manner” was too vague to meet the requirements of the Colorado Administrative Procedures Act, 24-4-101 et. seq., C.R.S. To address these concerns, the board adopted changes to section 100.15.3 to delete the concept of “professional manner,” and instead to specifically prohibit certain types of behavior when a certified operator is acting in a professional capacity. These prohibited behaviors are related to a certified operator’s demeanor while communicating/interacting with the public, the regulated community and regulators. The board similarly revised section 100.20.1(j) to clarify that certified operators who exhibit such behavior are subject to disciplinary action by the board.

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

REGULATION NO. 100

5 CCR 1003-2

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Effective Date:	September 30, 2007
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COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT

WATER AND WASTEWATER FACILITY OPERATORS CERTIFICATION REQUIREMENTS

REGULATION NO. 100

5 CCR 1003-2

100.1 AUTHORITY AND PURPOSE

100.1.1 Authority

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

100.1.2 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 100.9. Operators are encouraged to apply for certification in the highest classification consistent with their qualifications.

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) "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.
- (10) "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.
- (11) "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. 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.
- (12) "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.
- (13) "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.
- (14) "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.
- (15) "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.
- (16) "WASTEWATER TREATMENT FACILITY" means either a domestic wastewater treatment facility or an industrial wastewater treatment facility.
- (17) "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.
- (18) "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.

- (19) "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 ADMINISTRATIVE FUNCTIONS

100.3.1 In carrying out its responsibilities to administer the operator certification program pursuant to Article 9 of Title 25, C.R.S., the Board or its designee may carry out any of the following duties, including but not limited to:

- (a) administering the operator certification program;
- (b) collecting program fees for administration of the operator certification program;
- (c) administering validated examinations for operator certification;
- (d) 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;
- (l) evaluating work experience of applicants;
- (m) evaluating and approving training units for renewal of certificate;
- (n) evaluating and approving 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;
- (r) conducting failed exam reviews; or
- (s) preparing and distributing annual reports.

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

Description of the Facility	Plant Design Flow (in MGD)			
	Below 2	2 – 5	5.01 – 9.99	10 or more
<u>Ground Water Systems</u>	.	.	.	.
(a) Ground water source with no treatment or with no additional treatment beyond chlorine disinfection.	D	D	C	B
(b) Ground water source with ultraviolet or ozone disinfection.	D	C	C	B
(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.	C	C	B	B
<u>All Water Systems</u>				
(d) Any source utilizing bag or cartridge filtration to comply with primary drinking water standards ¹ . “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 re-used.	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.	C	B	B	A
(f) Any source utilizing conventional or direct	B	A	A	A

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.				
<u>Chemical Addition</u>	.	.	.	.
(g) Any source utilizing chemical treatment for the specific purpose of complying with secondary drinking water standards ² .	C	C	B	B
(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 ¹ .	B	B	A	A
(i) Any source utilizing chemical treatment for the specific purpose of controlling corrosion (i.e., lead and copper) in the distribution system.	C	C	B	B
(j) Any source utilizing fluoridation.	C	C	C	B
<u>Other</u>	.	.	.	.
(k) Water vending machines connected to a public water system that does not currently meet primary drinking water standards ¹ .	C	C	C	C

¹ "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.

² "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.

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

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 shall not be classified.

100.5 DOMESTIC WASTEWATER TREATMENT FACILITY CLASSIFICATION

100.5.1 Domestic wastewater 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	0.5-1.00	1.01-2.00	2.01-4.00	Above 4.00
(a) Waste stabilization ponds, including aerated and non-aerated types	D	C	C	B	B
(b) Trickling filter or rotating biological contactor	C	C	B	B	A
(c) Extended aeration process sequencing batch reactors (SBR) designed to operate in the extended aeration loading range.	C	B	B	B	A
(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.	B	B	B	B	A
(e) Recirculating sand filtration	D	C	C	C	C

(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.
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100.5.3 The classification of any domestic wastewater treatment facility may be changed at the discretion of the Division by reason of changes in any condition or circumstance on which the classification was predicated.

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:
 - (A) which discharge pursuant to a general industrial permit for Water Treatment Plant Wastewater Discharge, provided that the permitted water treatment 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; or
 - (B) which discharge pursuant to an industrial stormwater permit, a construction stormwater permit, a municipal stormwater permit, or a general industrial permit for the following: Construction Dewatering Activities; Aquatic Animal Production with Continuous and Intermittent Discharge; Sand and Gravel Process Water and Stormwater; Minimal Industrial Discharge; Subterranean Dewatering and Well Development; Hydrostatic Testing of Pipelines, Tanks and Similar Vessels; Non-Contact Cooling Water; Pesticides; or Commercial Washing of Outdoor Structures that meet both of the following conditions:
 - (I) 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; 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 a Class

2 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.

- (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.
- (iii) 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.
 - (A) Considering the criteria in sections 25-9-104(4)(a) through (d), C.R.S., the Board may approve class 2 classification for such a facility where it determines that the facility has demonstrated that:
 - (I) 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, 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.
 - (B) The Division shall evaluate a written request from the facility and shall provide the Board with a classification recommendation based 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.
 - (C) The Board shall approve or deny such classification requests at an adjudicatory hearing to be held at a regularly scheduled Board meeting.
 - (D) Each facility classified as a Class 2 facility under the authority of this subsection shall re-certify in writing, by December 31st of each year, that the conditions in part (A) of this subsection continue to be met.
- (iv) The Board has the authority to reclassify any 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.

(c) Class 1 Industrial Wastewater Treatment Facilities.

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)

<u>CLASSIFICATION</u>	<u>TREATMENT PROCESS¹</u>
Class A	Chemical conversion (e.g., cyanide destruction, hexavalent chromium reduction); Ion 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.

¹ 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 changes in any condition or circumstances on which the classification was predicated.

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.

100.7 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>	<u>POPULATION SERVED</u>
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 changes in any condition or circumstances on which the classification was predicated.

100.7.4 Water distribution systems 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 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 changes in any condition or circumstances on which the classification was predicated.

100.9 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 Basic Requirements for Certification by Examination

- (a) Applicants shall be evaluated by the Board or its designee as to education, experience, and knowledge related to the classification level for which the applicant seeks to be certified.
- (b) 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.
- (c) 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 100.9.8.

100.9.3 Minimum Educational Requirements for Certification by Examination

- (a) Applicants must have a high school diploma or a general equivalency diploma (GED), except as provided in section 100.9.3(c)
- (b) 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:
 - (i) have an additional six (6) months of qualifying experience; and
 - (ii) demonstrate the completion of 1.0 training units in a course approved as a substitute for entry-level experience requirements.
- (c) 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.
 - (i) 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.
 - (ii) After passing the examination, the certificate will be issued upon submitting proof of the high school diploma to the Board or its designee.

100.9.4 Experience Determinations for Certification by Examination

- (a) No more than one year of experience will be credited for employment/activities during any one calendar year.
- (b) 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.
- (c) The aggregate time spent operating multiple facilities shall be considered in any determination of whether to credit full-time experience or half-time experience.
- (d) 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.
- (e) Except as described in section 100.9.9 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.
- (f) 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.

100.9.5 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 designee will be guided by:

- (a) whether and to what degree the experience required technical knowledge of the operation of a water or wastewater facility;
- (b) 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
- (c) whether or not the experience included the responsible charge of a water or wastewater facility.

100.9.6 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.

100.9.7 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.

100.9.8 Table - Prior Certification and Experience Requirements

Certification Class	Prior Certification Required ¹	Minimum Experience Required
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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

¹ Prior certification must be for the same certification category as that of the examination being applied for.

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

- (a) Applicants for certification as Class D, Class1, 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.
- (b) After passing the examination, the certificate will be issued upon showing completion of satisfactory experience to the Board or its designee.
- (c) 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.
- (d) 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.

100.10 APPLICATION TO SIT FOR CERTIFICATION EXAMINATION

100.10.1 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 designee.

100.10.2 The Board shall designate the number of examination cycles during each calendar year.

100.10.3 For each examination cycle, the Board or its designee shall specify an application deadline.

100.10.4 All applications for certification examinations shall be made on forms provided by the Board or its designee.

100.10.5 Completed application materials and fees must be received by the Board or its designee on or before the application deadline for each examination cycle.

100.10.6 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).

100.10.7 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.

100.10.8 The Board or its designee 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.

100.10.9 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 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.

100.10.10 If an application is still disapproved after re-review, the applicant may appeal this determination to the Board.

- (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.

100.11 EXAMINATIONS

100.11.1 The Board or its designee 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 Examinations shall be held at places and times set by the Board or its designee. Advance announcements of the date and locations of examinations shall be made by the Board or its designee.

100.11.3 All examinations shall be written or administered electronically, except in such cases as the Board or its designee decide, on a case-by-case basis, represent proper exceptions to this requirement.

100.11.4 All examinations will be graded by the Board or its designee, and the applicants shall be notified of the results.

100.11.5 Examinees shall be provided an analysis of their examination performance indicating the level of knowledge demonstrated for each topic tested.

100.11.6 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.

100.11.7 Applicants who fail an examination may retest during subsequent, regularly scheduled examination cycles upon complying with all applicable application procedures including the payment of appropriate fees.

100.11.8 Any form of cheating on the part of an applicant will invalidate the results of his or her examination and may result in the applicant being barred from taking examinations for a period of 1 to 5 years, as determined by the Board following a hearing pursuant to Article 4 of Title 24, C.R.S.

100.12 EDUCATION AND CROSS EXPERIENCE SUBSTITUTED FOR EXPERIENCE REQUIREMENTS

100.12.1 Substitution of Education for Experience Requirements

- (a) Post-secondary education may also be substituted for the experience requirements of section 100.9 on the basis of successful completion of formal academic credit hours, as approved by the Board or its designee in accordance with section 100.12.2, for all or a portion of an academic year. For education substitution for experience, academic credit hours shall be calculated as follows:
 - (i) 15 semester hours = $\frac{1}{2}$ academic year = 6 months experience; 15 quarter hours = $\frac{1}{3}$ academic year = 4 months experience;
 - (ii) Training units: 300 contact hours or 30 training units = 15 quarter hours = 4 months experience;
 - (iii) 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.
- (b) Consideration of Field(s) of Study
 - (i) Credit for up to fifty percent (50%) of the applicable experience requirement of section 100.9 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 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 100.12.1(a).
 - (ii) Credit for up to twenty-five (25%) of the applicable experience requirement of section 100.9 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 100.12.1(a).

- (c) 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 may be granted for the completion of individual technically oriented courses as approved by the Board or its designee 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 100.12.1(a).
- (d) At least fifty percent (50%) of any experience requirement of section 100.9 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 100.9.

100.12.2 Approval of Training, Educational Courses, and Institutions

- (a) The Board or its designee 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-by-case determination that such courses or programs are directly and specifically relevant to the operation of water and wastewater facilities.
- (b) Approval of technically-oriented courses or programs, for purposes of substituting education for experience, shall be determined by the Board or its designee 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.
- (c) Approval of educational institutions for purposes of substituting education for experience shall be determined by the Board or its designee 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 designee the equivalency and suitability of the courses of study claimed for credit.
- (d) 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 designee. Such programs will receive credit in training units on the following basis:
 - (i) 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.
 - (ii) Three (3) training units shall equal one semester credit hour or two training units shall equal one quarter credit hour for purposes of equivalency.

100.12.3 Substitution of Cross-Experience for Experience Requirements

- (a) Cross-experience may be substituted for the experience requirements of section 100.9 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 shall be met by actual on-site operating experience in the specific certification category, water or wastewater, for which application is being made.
- (b) For the purpose of this section, “cross-experience” means that:
 - (i) 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;
 - (ii) 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;
 - (iii) 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
 - (iv) 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 CERTIFICATES

The Board or its designee shall award to the applicant a certificate designating the appropriate certification level upon satisfactory fulfillment of the requirements of section 100.13.1, 100.13.2 or 100.13.5, as appropriate, and payment of all applicable program fees listed in section 100.19.2.

New operator certificates shall be valid for three (3) years from the date of the certification eligibility notification letter. Renewal 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.

100.13.1 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 100.9.9;
 - (ii) a copy of a high school diploma pursuant to section 100.9.3(c);
 - (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.

100.13.2 Application for Renewal of Certificates

- (a) Certified operators must submit a written application for renewal to the Board or its 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 including meeting the renewal training unit requirements stated in section 100.14.
- (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 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 designee 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 100.13.2(e).

- (iv) It is the certified operator's responsibility to alert the Board or its designee 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 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 operator of a water or wastewater facility shall operate a facility in reliance on an expired certificate.
- (d) An operator may apply for renewal for two years following expiration of the certificate. The Board or its designee will renew the certificate if the operator pays the renewal and applicable late fees, as listed in section 100.19.2(d), and satisfies all applicable renewal requirements.
- (e) 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.

100.13.4 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.

100.13.5 Certificates by Reciprocity

- (a) Certificates may be issued by the Board or its 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.

- (b) Operators must submit a written application for certification by reciprocity to the Board or its designee.
- (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 100.13.1 and 100.19.

100.13.6 Certified operators shall update the Board or its designee with any changes to mailing address, telephone number, or email within 30 days of such change.

100.14 PROFESSIONAL DEVELOPMENT - TRAINING UNIT REQUIREMENTS FOR RENEWAL OF CERTIFICATION

100.14.1 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, before the operator’s certificate will be renewed.

- (a) 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.
- (b) 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.
- (c) 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.
- (d) If applicable, the training units from one course may be applied toward the renewal of more than one certificate.

100.14.2 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 Class 3	2.4 Training Units
Class A or Class 4	3.0 Training Units

100.14.3 All subject matter for which training units will be granted must be determined by the Board or its designee to be relevant and necessary to the successful operation of a water or wastewater facility.

- (a) The Board or its designee 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 section 100.14.1.
- (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 designee.
- (c) The Board or its designee 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 section 100.14.1.

100.14.4 Training units shall be awarded to certified operators for teaching a classroom course that has been approved by the Board or its designee. The training units awarded shall be double the training units approved for the course.

100.14.5 Institutions, seminar presenters, and others may seek approval of their training or educational courses or programs by application to the Board or its designee. Such an application must demonstrate that their proposed material, curricula, contact hour equivalency, and facilities meet the criteria established in section 100.12.2.

100.15 CERTIFIED OPERATOR DUTIES

100.15.1 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.

100.15.2 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 100.16.6 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.

100.15.3 Certified operators shall conduct themselves in a professional manner when acting in the capacity of a certified operator. "Professional manner" is defined as exhibiting dignified and respectful behavior towards the public, the regulated community and regulators.

100.16 CERTIFIED OPERATOR IN RESPONSIBLE CHARGE DUTIES

100.16.1 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.

100.16.2 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.

100.16.3 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.

100.16.4 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.

100.16.5 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 100.16.6;
- (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 100.15.

100.16.6 Certified operators in responsible charge of a water or wastewater facility may delegate tasks or activities to other facility operators when delineated by a written operating plan.

- (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 by other facility operators under their charge.

100.17 AUTHORIZATION FOR CONTINUED OPERATION OF WATER DISTRIBUTION AND WASTEWATER COLLECTION SYSTEMS

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.

100.17.2 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.
- (b) Such an 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.
- (c) Authorization for continued system operation under this 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.
- (e) 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.
- (f) 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.

100.18 RESPONSIBILITIES OF WATER AND WASTEWATER FACILITY OWNERS

100.18.1 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 100.16.
- (d) Contracts for limited services do not fulfill the owner’s obligation, under section 100.18.1(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.

100.18.2 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 100.16.6.

100.18.3 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 100.16.6 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.

100.18.4 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:

- (a) 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.

100.18.5 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

<u>Facility or System Classification</u>	<u>Certified Operator in Responsible Charge Minimum Required Certification Levels</u>
<u>Water Systems</u>	
Water Treatment	
A	A
B	A or B
C	A, B, or C
D	A, B, C, D, S ¹ or T ²
Water Distribution	
4	4
3	4 or 3
2	4, 3 or 2
1	4, 3, 2, 1, or S ¹
<u>Domestic Wastewater Systems</u>	
Wastewater Treatment	
A	A
B	A or B
C	A, B, or C
D	A, B, C, D, or S ³
Wastewater Collection	
4	4

3	4 or 3
2	4, 3 or 2
1	4, 3, 2, 1, or S ³
<u>Industrial Wastewater Systems</u>	
A	A
B	A or B
C	A, B, or C
D	A, B, C, or D, or S ³

¹ Applicable only in accordance with section 100.18.5(d)

² Applicable only in accordance with section 100.18.5(c)

³ Applicable only in accordance with section 100.18.5(e)

- (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 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 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 as a Class “1” wastewater collection system under the provisions of this regulation.

100.18.6 The Division shall investigate any instances of possible violations of the requirements of section 100.18 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.

100.19 FEES

100.19.1 Application fees for certification, renewal of certification, and issuance of a certificate upon a Board finding of reciprocity shall be \$15, and shall be nonrefundable.

100.19.2 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 by examination; and
 - (ii) \$70.00 for each renewal certification and each new certification 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 certification or certification 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 100.12 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 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.

100.20 DISCIPLINARY PROCEEDINGS

100.20.1 The 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:

- (a) 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 100.15 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 Regulation, 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 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;
- (i) representing oneself as holding a valid operator's certificate after the expiration, suspension, or revocation of the certificate; or

- (j) failing to conduct oneself in a professional manner when acting in the capacity of a certified operator. "Professional manner" is defined as exhibiting dignified and respectful behavior towards regulators, the regulated community and the public.

100.20.2 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 100.16 of this regulation; 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 100.15 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.

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 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 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 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) 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.

100.20.7 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.

100.20.8 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 reliance on a suspended or revoked certificate.

100.21 HEARINGS AND APPEALS

100.21.1 Any water or wastewater facility owner who seeks a hearing in response to a Division finding of a violation under section 100.18.1 or a Department assessment of a civil penalty for such violation may request a hearing 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.

100.21.2 Any certified operator, certified operator in responsible charge, or other person affected or aggrieved by a decision of the Board's designee or the Division 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.

100.21.3 The Board shall grant any hearing request made pursuant to section 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.

100.22 - 29 RESERVED

100.30 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE; NOVEMBER, 2000 RULEMAKING

The provisions of sections 25-9-104(1)(a), (3), (4), (5) and (6), C.R.S.; 25-9-106; 25-9-106.2; 25-9-106.3; 25-9-107; 25-9-108, C.R.S., provide the specific statutory authority for the adoption of these regulatory provisions. The Board also adopted, in compliance with section 24-4-103(4), C.R.S., the following statement of basis and purpose.

BASIS AND PURPOSE

Background and Overview

The 2000 Colorado General Assembly adopted HB 00-1431, revising the certification procedures and requirements for operators of water and wastewater facilities, which include water treatment facilities, domestic and industrial wastewater treatment facilities, water distribution systems and wastewater collection systems. The bill established the composition, duties and rulemaking authority of the Water and Wastewater Facility Operators Certification Board (formerly the Plant Operators Certification Board).

The Board intends that the rules adopted pursuant to HB 00-1431 will comply with guidelines established by the United States Environmental Protection Agency (EPA) under section 1419(a) of the federal Safe Drinking Water Act, which specifies minimum standards for certification and recertification of operators of community and nontransient noncommunity public water systems. In particular, the Board anticipates that this regulation will satisfy EPA requirements and allow that agency to release to the state federal funding that is contingent on adoption of appropriate certification requirements.

Operator Classification and Qualification Issues

In this rulemaking, the Board established various classes of operators for water treatment facilities, domestic and industrial wastewater treatment facilities, water distribution systems and wastewater collection systems. Pursuant to HB 00-1431, the classes of operators established by the Board reflect the differing levels of complexity encountered in operating the various types of facilities and systems. This legislation also authorized the Board to establish separate certification classifications for operators of multiple facilities and for operators of certain small systems. Because of time constraints imposed by EPA deadlines, the Board has chosen to address the issue of operators of multiple facilities in a later rulemaking and has simply "reserved" this section at this time. The Board has made specific provisions for the certification of operators of Small Water and Wastewater Systems and for Transient Non-community Water Systems, as discussed below.

The Board also defined a process for determining the qualifications for certifying and renewing the certification of operators in each of the various classes. In accordance with HB 00-1431 and EPA guidelines, the Board adopted minimum education and experience requirements for operators, a requirement that examinations be validated, and a requirement that operators meet ongoing training requirements in order to renew their certification. The Board intends that if an

operator wishes to renew multiple certifications, the same training units may be applied to meet the requirements of more than one certification renewal if the courses in question have been accredited for each of the certifications in question. Operators with multiple certifications are encouraged to take training courses specific to each of their certifications.

The Board also chose appropriate levels at which an applicant may substitute experience for education, or education for experience, in order to allow operator certification where a combination of these components demonstrates that the operator is competent to operate a particular class of facility. Although either education or cross-experience may be substituted for a portion of the experience requirement for any classification, the Board intends that no less than 50 percent of any experience requirement must be met by actual on-site operating experience in the classification applied for. A provision providing for transitional renewal training requirements for operators whose certificates expire prior to January 30, 2004 is also included.

Minimum Experience for Entry Level Operators

According to EPA regulations, operators seeking to be certified must have a specified amount of minimum experience. Several stakeholders expressed concern that requiring a minimum amount of experience for all operators placed an undue burden on entry-level operators in rural areas of Colorado because they would not have the time or financial capability to meet such a certification requirement. In response to these concerns, the Board created a new level of certification for operators of water treatment facilities and water distribution systems serving Transient Non-community Water Systems that draw water from ground water sources not under the influence of surface water, serve less than 100

persons per day, and utilize only non-gaseous chlorine disinfection. Recognizing that such transient non-community systems are outside the scope of EPA guidelines, the Board chose not to impose a minimum experience requirement on such operators and allowed them to gain certification based solely on the passage of a written examination that focuses on subjects particularly relevant to operating this category of transient non-community water treatment facilities and transient non-community water distribution systems. For other entry level water and wastewater facility operators (Class D and Class 1), the Board has established a one-month minimum experience requirement. In order to provide flexibility to entry-level operators, the Board has established a number of options for meeting this experience requirement, including on-the-job training, apprenticeship, and on-site or correspondence training courses.

The Board also created a Small System classification for both water and wastewater facilities. These classifications apply to facilities that serve under 3300 persons and that otherwise fall into the Class D treatment and Class 1 distribution or collection classifications. Small water system operators shall be certified by taking a single examination in water treatment and distribution. Small wastewater system operators shall be certified by taking a single examination in wastewater collection and treatment. Renewal training requirements for these certificates have been set at 1.8 training units. During the transition period prior to the construction and validation of these examinations, applicants for these certifications will take both the Class D and Class 1 examinations in the appropriate category. The application and fee structures have been adjusted to reflect the degree of overlap among these requirements.

Classification of Water and Wastewater Treatment Facilities

Generally, the Board, chose to establish a system for classification of the State's water and wastewater treatment facilities according to their prior system of classification. Accordingly, the Board adopted a classification scheme which takes into consideration factors such as the size, complexity, and amount of water processed through the facility. The Board determined that it would be most efficient for the Division to retain the authority to classify facilities and modify the classification of any facility. Classification decisions by the Division can be appealed to the Board.

The Board recognizes that water treatment processes that do not utilize chemicals are more problematic and impose a greater risk on public health. Therefore, the Board requires that a higher class of distribution system be used in combination with treatment facilities that utilize ground water with a waiver of disinfection, including ultraviolet and ozone disinfection. This is due to the fact that there is no residual disinfectant in the distribution system.

Classification of Water Distribution and Wastewater Collection Systems

In classifying water distribution systems and wastewater collection systems the Board chose to initially classify the systems based on population, which the Board believes serves as an adequate surrogate for complexity. Additionally, the Board provided that the Division can change the classification of any particular facility based on complexity factors. The Board intends to revisit their initial classification scheme for water distribution and wastewater collection systems in a future rulemaking to consider adoption of a classification system that will more accurately reflect the complexities and differences between the various types of distribution and collection systems.

Fees

The new state legislation authorized the Board to adopt application and program fees which reflect the actual costs of administering the operator certification program. The Board has established a certification application fee of \$15, as specified in the statute. It also established two types of program fees: (1) an examination fee of \$25 to cover the cost of administering each examination, and (2) an administration fee that will be charged upon issuance of a certificate and upon renewal of a certificate. The administration fee will cover ongoing costs of program administration by a third party contractor. The Board did not adopt specific fee amounts in this rulemaking because the arrangements with a third party contractor,

which will determine the necessary amount of the fees, have not yet been finalized. The Board therefore is reserving the adoption of specific administration fees for a later rulemaking. The Board also anticipates that the fees established in this rulemaking may need to be revised as the transition to this new mode of implementing the operator certification program is completed.

Status of Existing Operators

The Board chose to certify under these regulations those operators of water and wastewater treatment facilities who had been previously certified under the prior certification system. The Board also chose to certify under these regulations those operators of water distribution systems

and wastewater collection systems who had been previously certified under the voluntary program administered by the Colorado Water and Wastewater Collection Systems Certification Council, based on the understanding that the voluntary certification program, and in particular the exam administered under the voluntary program, was adequate to ensure the protection of public health and the environment, and the safe operation of water distribution and wastewater collection systems.

In addition, the new regulation provides a procedure to authorize certain existing operators of existing water distribution and wastewater collection systems who have not obtained voluntary certification to continue operation of the specific systems where such operators are currently employed for a period of time without receiving a certificate. Pursuant to EPA guidelines the Board chose to allow operators of existing systems, who were authorized to make process control and/or system integrity decisions about water quality or quantity that may affect the public health or environment, to continue operation of their systems so long as certain requirements are met and a certain procedure is followed. This procedure allows owners of such systems to apply to the Board for an "Authorization for Continued Operation" for the existing operators of their system. Pursuant to EPA guidelines, the Board chose to make the "Authorization for Continued Operation" site-specific and non-transferable. To maintain this authorization, operators will need to meet the same on-going training requirements as certified operators. To move to another facility, operators would need to meet all initial certification requirements, including passing the appropriate exam. These same procedures apply to operators who hold existing restricted certificate issued under authority of the regulations being repealed in this rulemaking.

Operator Responsibilities

One section of the regulation adopted by the Board specifies the duties of certified operators and defines certain standards of performance for certified operators of affected facilities. The regulation requires certified operators to exercise reasonable care and judgment while performing their duties and in supervising facility operations. The regulation also requires operators to keep current with the Board information on where the operator(s) can be contacted so that the Board can notify the operator(s) of certification expiration, renewal requirements, and testing information.

Owner Responsibilities

Another section of the regulation adopted by the Board specifies the duties of owners of water and wastewater facilities. Pursuant to the legislation and EPA guidelines, the Board chose to require owners to place the direct supervision of their facilities under the control of an "operator in responsible charge" holding a valid certification equal to or greater than the classification of the facility. The Board clarified that a direct supervisor relationship exists if the operator in responsible charge has supervisory responsibility and authority with respect to other operators. The Board does not intend for direct supervision to mean that the operator in responsible charge must be on-site at all times.

In order to meet EPA guidelines, the Board required that all process control and/or system integrity decisions about water quality or quantity that may affect the public health or the

environment be made by either an operator in responsible charge or another certified operator. This operator must be certified at a level equal to or higher than that of the facility. The Board also required owners to designate a certified operator who would be available for each operating shift. The Board clarified that in order for an operator to be "available," he or she must be on-site or able to be contacted as needed to initiate appropriate actions in a timely manner.

Finally, the regulation requires owners to submit to the Board information on the operator(s) in responsible charge of their facility so that the Board and Division can more efficiently enforce the provisions of this regulation and better protect the public health.

Division Enforcement Procedures

HB 00-1431 also set out the roles of the Water Quality Control Division and the Board in enforcing the new operator certification program. The Board recognized the role of the Division as the agency primarily responsible for investigating and reporting to the Board any misconduct by water and wastewater facility operators. Any disciplinary action regarding operators would be taken by the Board, after an opportunity for a hearing. Pursuant to the legislation, the Board also chose to allow owners of water and wastewater facilities to seek a hearing before the Board in response to a Division finding of a violation of the regulations or in response to a Department assessment of a civil penalty. The rule also establishes a process by which any person, affected or aggrieved by a decision of Division or a third party contractor implementing certain aspect of the program may seek relief through an appeal or hearing before the Board.

Nonprofit Contractors Issues

HB 00-1431 authorized the Board to appoint one or more independent nonprofit corporations to administer the operator certification program, including providing examinations, issuing certification documents, evaluating continuing training requirements for renewal of certification, and evaluating requests for reciprocity. The Board specified in the new regulation the program administration duties that it may choose to delegate to a nonprofit corporation.

100.31 FINDINGS IN SUPPORT OF EMERGENCY ADOPTION OF REGULATION NO. 100; DECEMBER 5, 2000

In addition to its adoption of Regulation No. 100 in accordance with the standard procedures specified in section 24-4-103, C.R.S., which result in an effective date for this regulation on a permanent basis of January 30, 2001, the Board also is adopting the rule on an emergency basis with an effective date of December 5, 2000.

In order to satisfy the new federal requirements noted in section 100.30 above, the modified operators certification program established by these regulations must be in effect by February, 2001. In addition, the new state legislation noted above, which became effective in May, 2000, mandates that the state's operators certification program be implemented in accordance with its provisions. This new regulation needs to be in effect to assure that program implementation is consistent with the new statutory provisions. Because the already-established 2001 certification examination cycle begins in January, 2001, with an application deadline of December 15, 2000, there would be substantial disruption to the certification program, with serious financial implications for operators whose employment depends upon obtaining certification, if this new regulation did not become effective immediately.

Therefore, the Board finds that the immediate adoption of Regulation No. 100 with an effective date of December 5, 2000 is imperatively necessary to comply with state law and for the preservation of public health, safety and welfare, and that compliance with the requirements of section 24-4-103, C.R.S. as to the normal effective date for new regulations would be contrary to the public interest.

100.32 FINDINGS IN SUPPORT OF EMERGENCY ADOPTION OF REVISIONS TO REGULATION NO. 100.22.2(b); JANUARY 30, 2001

In order to satisfy the new federal requirements noted in section 100.30 above, the modified operators certification program established by the Board's regulations must be in effect by February 5, 2001. In its December 5, 2000 rulemaking, the Board reserved a provision in section 100.22.2(b) for an administration fee. This rule revision establishes the amount of the fee.

The Board has determined that collection of a fee to help cover the costs of administration of the Operators Certification Program by nonprofit, third party contractors is necessary to effectively carry out the program. The Board also concludes that immediate imposition of the fee is necessary in order to assure that the program is fully implemented by the federal deadline. Therefore, the Board finds that the immediate adoption of the administration fee in section 100.22.2(b) with an effective date of January 30, 2001 is imperatively necessary to comply with state law and for preservation of public health, safety and welfare, and that compliance with the requirements of section 24-4-103, C.R.S. as to the normal effective date for new regulations would be contrary to the public interest.

100.33 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE; ARCH, 2001 RULEMAKING

The provisions of sections 25-9-104(1)(a), (3), (4), (5) and (6); 25-9-105; 25-9-106.3; 25-9-107; 25-9-108, C.R.S., provide the specific statutory authority for the adoption of these regulatory provisions. The Board also adopted, in compliance with section 24-4-103(4), C.R.S., the following statement of basis and purpose.

BASIS AND PURPOSE

The 2000 Colorado General Assembly adopted HB 00-1431, revising the certification procedures and requirements for operators of water and wastewater facilities, which include water treatment facilities, domestic and industrial wastewater treatment facilities, water distribution systems and wastewater collection systems. The bill established the composition, duties and rulemaking authority of the Water and Wastewater Facility Operators Certification Board (formerly the Plant Operators Certification Board).

The new state legislation authorized the Board to adopt application and program fees that reflect the actual costs of administering the operator certification program. The Board has previously established a certification application fee of \$15, as specified in the statute. Regulation No. 100 also provides for two types of program fees: (1) an examination fee to cover the cost of administering each examination, and (2) an administration fee that will be charged upon issuance of a certificate and upon renewal of a certificate. The Board has previously established an examination fee of \$25.

On January 30, 2001, the Board adopted on an emergency basis an administration fee of \$60.00 for each new and renewal certification. This administration fee will cover ongoing costs of program administration by one or more third party contractors. The amount of this fee is based upon evidence presented in the emergency rulemaking hearing regarding the actual costs of program administration, taking into account a level of uncertainty associated with this new third party role. In this rulemaking, based on the evidence presented the Board has readopted this same administration fee. The Board intends that the amount of this fee will be revisited from time to time in the future as more experience with implementation of the Operators Certification Program by the third party contractors is gained.

Section 25-9-104 (1)(a) C.R.S. requires a failed examination review without specifying any specific format or requirements for this review. The current regulation (section 100.11.5, 5 C.C.R. 1003-2) contains a similar requirement. It is possible, however, to interpret the regulation as requiring that failed examinees be permitted to review actual copies of the examination. The Board recognizes that providers of standardized examinations are reluctant to permit, and often refuse to permit, copies of their examinations to be available for individual review. These providers generally produce detailed,

individualized statistical analyses of examination results. Such analyses can form the basis for a meaningful review of individual's performance on examinations.

The Board, therefore, has decided to amend the regulatory language to more clearly reflect the statutorily permitted flexibility regarding failed examination reviews. The specific format of failed examination review sessions may be determined by the Board or its designee, consistent with the restrictions imposed by the provider(s) of the standardized examinations used in certification testing.

100.34 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE; AUGUST, 2001 RULEMAKING

The provisions of sections 25-9-104(1)(a), (3), (4), (5), (6) and (6.5); 25-9-105; 25-9-106.3; 25-9-107; 25-9-108; and 25-9-110, C.R.S., provide the specific statutory authority for the adoption of these regulatory provisions. The Board also adopted, in compliance with section 24-4-103(4), C.R.S., the following statement of basis and purpose.

BASIS AND PURPOSE

1. Subsections 100.18.2 and 100.18.3:

The previous version of section 18, 5 C.C.R. 1003-2, made provision for the continuance of the certifications of water distribution and wastewater collection operators who are (as of January 30, 2001) currently certified under the voluntary certification program administered by the Colorado Water Distribution and Wastewater Collection Systems Certification Council by declaring, in section 100.18.1, that such certifications will be considered valid. Operators who have not been certified under the voluntary program have an opportunity to obtain either a full or a restricted certification under the provisions of section 100.18.2. No provision was made to address those operators who hold either expired voluntary certifications or who are under-certified for the level of their job responsibility. This amendment broadens the scope of section 100.18.2 to include such operators.

The original structure of the first paragraph of section 100.18.2 mixed provisions applicable to two distinct groups of operators: those currently operating water distribution and wastewater collection systems and those holding restricted water or wastewater treatment certifications valid under the previous version of these regulations. This admixture of subjects makes the language and interpretation of the existing regulation awkward. Therefore, a new section, 100.18.3, is appropriate. This section applies specifically to operators who hold currently valid restricted water and wastewater treatment certificates.

2. Subsections 100.23.3 and 100.23.4:

Section 25-9-104(6.5), C.R.S., vests the responsibility to investigate instances of possible operator misconduct with the Water Quality Control Division, not with an "other Board designee". Similarly, sections 25-9-110(3) through 25-9-110(6), C.R.S., vest enforcement authority for violations of section 25-9-110(2), C.R.S., with the Division. The enforcement of section 100.21, 5 C.C.R. 1003-2, is also vested in the Division. The original language of sections 100.23.3 and 100.23.4 of the regulation did not accurately reflect this placement of responsibility. The language adopted by the Board eliminates reference to designees of the Board as investigative agents.

3. Subsection 100.11.8:

Similar to subsections 100.23.3 and 100.23.4, this section was revised to eliminate the reference to designees of the Board, since the hearing in question would appropriately be held by the Board.

4. Subsection 100.21.5:

This subsection was revised to clarify that higher levels of water treatment certifications are acceptable for operators in responsible charge of transient non-community water systems. Therefore, for example, an operator with a level "D" water treatment certification may be an operator in responsible charge for a transient non-community system and need not hold a separate water distribution system certification. On the other hand, that operator must hold a level "1" or higher water distribution certification in addition to the level "D" water treatment certification to be a designated operator in responsible charge of a small water system. The Board intends that small systems may have a single operator with the required certifications, or may have multiple operators who together hold the required certifications.

100.35 FINDINGS AND STATEMENT OF BASIS AND PURPOSE FOR ADOPTION ON AN EMERGENCY BASIS OF REVISIONS TO REGULATION NO. 100 JANUARY, 2002 RULEMAKING

On January 29, 2002 the Board adopted revisions to Regulation No. 100, Water and Wastewater Facility Operator Certification Requirements [5 CCR 1003-2] to establish a new subsection 100.14.6, regarding "supplemental training" both on an emergency basis pursuant to § 24-4-103(6), C.R.S., and as a final rule pursuant to § 24-4-103, C.R.S.

The Board has established a new category for "supplemental training" courses. These courses are those that are found to provide useful operator knowledge but are not directly related to water or wastewater facility operations. Examples of such courses would include courses on topics such as first aid or word processing skills, which provide general knowledge that may be useful to certified operators, but do not contribute directly to an operator's professional water or wastewater facility expertise and knowledge. Supplemental training courses would be ones that do not fall into the specific categories listed in subsection 100.14.4 (a) through (e).

The Board has determined that it is appropriate to allow training units associated with such supplemental training courses to be used for up to (but not more than) 50% of the training requirements to renew a certificate. This system will allow operators to get credit for obtaining training in useful general subject matter areas, while assuring that at least half of the training units relied on for renewal are related to courses that are directly applicable to water and wastewater facility operational expertise.

The Board's permanent rule adoption complies with the hearing procedures and notice requirements of § 24-4-103, C.R.S. The Board concludes that adoption of the same requirements on an emergency basis is imperatively necessary to protection of public health and safety and that compliance with the effective date provisions of § 24-4-103, C.R.S., would be contrary to the public interest. The purpose of the emergency adoption is to assure that operators seeking certificate renewal prior to the effective date of the permanent rule obtain training that is directly related to water and wastewater facility operational expertise, thereby advancing the purposes of operator certification -- protection of public health and safety. In addition, emergency adoption will minimize confusion and inequity between the types of approval given to operator training courses in 2002.

100.36 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE; JANUARY, 2002 RULEMAKING

The provisions of sections 29-5-104(1)(a), 25-9-104(3), 25-9-104(4) and 25-9-106.2, C.R.S., provide the specific statutory authority for the adoption of these regulatory provisions. The Board also adopted, in compliance with section 24-4-103(4), C.R.S, the following statement of basis and purpose.

BASIS AND PURPOSE

1. Section 100.6:

The Board recognizes that there are a variety of industrial facilities whose wastewater handling involves only physical settling, filtration, or separation processes. These facilities process wastewater without chemical addition and normally require only the monitoring of otherwise passive physical processes. The Board has determined that such facilities represent a lower degree of complexity than is represented by the "C" level of the existing industrial wastewater facility classifications. The Board also recognizes that the facilities described above do not require the supervision of an industrial wastewater facility operator having the level of expertise required of a "C" level operator. Therefore, the Board has determined that a new industrial wastewater facility classification, the "D" level is appropriate. This classification shall consist of facilities whose wastewater handling is purely physical and is without routine chemical addition or complex mechanical manipulation. Subsection 100.6.2 is amended to establish the "D" level industrial wastewater facility classification.

To provide for the proper supervision of "D" level industrial wastewater facilities, the Board establishes a "D" level industrial wastewater facility operators certification. This certification level shall have the same initial certification and renewal requirements as the "D" level water treatment and domestic wastewater treatment certifications.

To allow a degree of flexibility for facilities that only occasionally use processes classed at a higher level than those regularly employed, the Board has broadened the language of subsection 100.6.4 to allow for the occasional use of such processes without requiring a facility classification upgrade.

2. Subsection 100.9.7(a)(i):

This subsection describes the experience requirement for "D" level operators. The subsection is amended to include "D" level industrial wastewater operators within its existing provisions.

3. Subsection 100.21.5:

This subsection is amended to include "D" level industrial wastewater as a listed facility classification and operator certification level. The final paragraph of subsection 100.21.5 was made obsolete by the rulemaking of August 28, 2001, and is hereby deleted.

100.37 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE; APRIL, 2002 RULEMAKING

The provisions of sections 25-9-104(1)(a), 25-9-104(3), 25-9-104(4) and 25-9-106.2, C.R.S., provide the specific statutory authority for the adoption of these regulatory provisions. The Board also adopted, in compliance with section 24-4-103(4), C.R.S, the following statement of basis and purpose.

BASIS AND PURPOSE

Section 100.6:

The capitalization of the word "and" in the process descriptions for Class B industrial wastewater treatment facilities is an error. The case of the word "and" is, therefore, changed to lower case.

The Board recognizes that stormwater runoff is not an industrial wastewater. Therefore, the listing of "stormwater runoff control ponds" as an example of a process utilized in a class "D" industrial wastewater facility is an error and is hereby deleted.

100.38 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE; MAY, 2002 RULEMAKING

The provisions of sections 29-5-104(1)(a) and 25-9-104(3), C.R.S., provide the specific regulatory authority for the adoption of this regulatory provision. The Board also adopted, in compliance with section 24-4-103(4), C.R.S., the following statement of basis and purpose.

BASIS AND PURPOSE

In order to maintain enforcement primacy under the Safe Drinking Water Act, the State needs to approve parties who are qualified to make and to assure the quality of certain analyses required by the Environmental Protection Agency (EPA). Most of the required analyses are already made by certified operators of water treatment facilities and water distribution systems. Rather than develop a new certification program to approve parties under the EPA rules, the Board has decided to incorporate the EPA requirements into the existing operators certification program.

Beginning with the Fall 2002 examinations, the Board will expand the coverage of the certification examinations to cover the analyses required by EPA. Because the content of certification examinations is reserved by statute and regulation to the Board, the inclusion of the EPA-required analyses in the certification examinations will not require a regulatory change. However, operators who are already certified will need to acquire training in the EPA requirements. To assure that currently certified operators receive training in the EPA analysis and quality assurance requirements, an ongoing training requirement, to be completed within three years of the start of the Fall 2002 examination cycle, is hereby established.

100.39 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE: MARCH 2003 RULEMAKING

Provisions of section 25-9-104(1)(a), C.R.S., provide the specific statutory authority for the adoption of these amendments to the established regulatory provisions of Regulation 100 (5 CCR 1003-2). The Board also adopted, in compliance with section 24-4-103(4), C.R.S., the following statement of basis and purpose.

BASIS AND PURPOSE

The Board has determined that the following sections must be amended in order to correct errors and to clarify the intent of the Regulation: sections 100.1.1, 100.2(15), 100.2(16), 100.4.2 – footnote #1, 100.4.2 – footnote #3, 100.6.2, 100.7.2, 100.10.1, 100.10.2, 100.10.5, 100.11.1, 100.11.8, 100.14.1, 100.14.7, 100.19.1, 100.22.4, and 100.23.5. None of these amendments are intended to substantively modify the Regulation or to change the current practice of the Board.

Section 100.9.6, which details the experience requirements for certification, was reorganized to clarify the experience required for various certification levels. The Board also made explicit its long-standing practice of considering domestic and industrial wastewater treatment experience to be interchangeable for purposes of qualifying to sit for a certification examination.

The failed examination review required by statute (25-9-104, C.R.S.) is non-specific as to format; the Board has determined that the corresponding regulatory provision, section 100.11.5, shall likewise be non-specific as to format. This change permits the Board to accept the detailed, individualized analyses prepared by the examination provider as an appropriate examination review.

The Board has determined that the training required for certification renewal will have “core” and “supplemental” components. The amendment to sections 100.14.4 through 100.14.6 adopted by the Board clarifies the relationship between core and supplemental training, gives examples of core subject matter, specifically authorizes the granting of supplemental credit for non-listed topics, and reorganizes the sections so that they are more readily understood.

Section 100.18.3 is obsolete and substantively conflicts with the broad acceptance of prior certifications granted in section 100.9.1. The Board has determined that section 100.18.3 should be deleted.

100.40 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE: OCTOBER 2004 RULEMAKING

Provisions of section 25-9-108, C.R.S., provide the specific statutory authority for the adoption of these amendments to the established regulatory provisions of Regulation 100 (5 CCR 1003-2). The Board also adopted, in compliance with section 24-4-103(4), C.R.S., the following statement of basis and purpose.

BASIS AND PURPOSE

A. New and Revised Fees.

The Board has revised section 100.22.2 to modify the current examination and administration fees. The existing \$25.00 examination fee is inadequate to cover the actual cost of certification exams provided by ABC. Up until now, the resulting deficit has been made up by the administration fee. However, the Board agrees with the CECTI and Certification Council proposal that it is more appropriate to increase the examination fee (to \$35.00), while reducing the administration fee (from \$60.00 to \$50.00) for those obtaining a new certification by examination. The net result will be no change in total fees for those passing a certification examination to obtain a new certification at a higher level. Those who take an examination and fail will incur a somewhat higher expense. The Board also agrees that it is appropriate not to make any change in the administration fees at this time for those obtaining renewal certifications or certification by reciprocity.

B. Cross-Experience Training for Certification Renewal.

Subsection 100.14.1 has been revised to allow a portion of the training units required for certification renewal to be obtained from courses approved as core training in categories other than the operator category for the certification being renewed. The Board has determined that this is consistent with the fact that "supplemental" training courses on a wide variety of topics are already allowed to provide a portion of the training units for certification renewal. This approach is also consistent with the fact that up to 50 percent of the experience requirement for operators qualifying to take certification examinations can be based on "cross-experience".

The revised regulation clarifies that at least 50 percent of the training units for certification renewal must be obtained from core training courses approved in the certification category being renewed. The remainder of the training units may consist of any combination of supplemental training units and/or training units approved as core training in other certification categories. The Board also has included language to prevent "double-counting" the training units from a single course. For example, if a course has been approved for 1.0 training units in each of the certification categories, an operator renewing a class A water treatment operator certification may count the 1.0 training unit toward renewal but may not also use cross-experience credit for the same course, even though it has been approved for training units in other certification categories.

C. Examination Feedback.

The Colorado operators certification statute previously required that each of the Board's nonprofit contractors "conducts failed exam reviews" following each certification examination cycle. This provision was amended in House Bill 04-1211, adopted by the 2004 session of the Colorado General Assembly, to provide that each contractor "provides feedback to examinees upon request following each examination". Subsection 100.11.5 has been revised to require that feedback regarding applicants' performance on the individual topics tested be provided to each person taking an operators certification examination. This new language goes beyond the revised statutory mandate, which only requires such feedback upon

request. However, the Board has provided in the regulation for the automatic provision of feedback to all examinees, since that is consistent with the contractors' current practice.

D. Specific Training Requirement for Operators Conducting Certain Quality Control Analyses

In order to maintain enforcement primacy under the Safe Drinking Water Act, the State must approve parties who are qualified to make and to assure the quality of certain analyses required by the Environmental Protection Agency ("EPA"). These requirements are detailed in the Colorado Primary Drinking Water Regulation, 5 CCR 1003-1, Article 7.5, "Disinfectant Residuals, Disinfection Byproducts, and Disinfection Byproduct Precursors." Colorado elected to approve certified operators as the parties approved by the State to perform these analyses.

To meet this requirement, the Board approved the original version of subsection 100.14.6 of Regulation 100 in May 2002. However, as originally adopted, the subsection was overly broad. The amendment approved by the Board in this rulemaking clarifies that subsection 100.14.6 applies only to those operators whose duties include performing the above-mentioned analyses and associated quality assurance procedures required by the article 7.5 of the Colorado Primary Drinking Water Regulation.

100.41 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE AND EMERGENCY FINDINGS: NOVEMBER 2004 RULEMAKING

Provisions of section 25-9-108, C.R.S., provide the specific statutory authority for the adoption of these amendments to the established regulatory provisions of Regulation 100 (5 CCR 1003-2). The Board also adopted, in compliance with section 24-4-103(4), C.R.S., the following statement of basis and purpose.

BASIS AND PURPOSE

The Board also adopted a new training unit course approval fee of \$50.00, to cover the cost of the contractors' review of training courses submitted through the new online review and approval system. The Board determined that it is appropriate for the costs of the training unit approval process to be covered by training providers. Establishing a reasonable fee for this service should also have the added benefit of discouraging submittal of training course approval applications for courses of marginal relevance or benefit to certified operators.

In order to address certain special circumstances, the Board has created three exceptions to the \$50.00 training unit approval fee. First, the Board intends that appropriate courses from accredited educational institutions in the United States, and equivalent institutions outside the United States, can be used for training unit credit for certification renewal without approval of the specific courses by the Board or its designee. However, some educational institutions may wish to have their courses listed with other approved training unit opportunities, which generally are posted on the web site of the Board and/or its designee. If an educational institution wishes to have its courses posted along with other approved training units, its courses will be subject to the usual \$50.00 fee and will be reviewed by the normal training unit review process.

The Board recognizes that in some instances an individual may take a course that provides relevant and appropriate operator training, but which has not been submitted by the course sponsor for training unit approval. For example, this could occur if an operator attends training at an out-of-state national conference that has not submitted its courses for approval in Colorado. To reduce the hardship on individuals seeking approval of such courses, the Board established a reduced fee of \$25.00 for applications for approval of a course submitted for review by an individual attending the course. To assure that this option is not used by course sponsors as an opportunity to avoid payment of the usual \$50.00 fee, the Board provided that any course submitted for approval by an individual attending a course will be approved only for that individual.

Finally, to account for other special circumstances that may arise, the Board established an opportunity for case-by-case waiver of the \$50.00 fee. The Board intends that its contractors may use this provision to avoid financial hardships and the potential unintended consequence of reducing training opportunities for Colorado operators. The Board assumes that this provision will apply infrequently.

The Board provided that the new training unit approval fee will apply to all courses approved for offering in 2005 and later. The Board understands that while some courses have already been submitted and reviewed for offering in 2005, course sponsors submitting such courses have been notified that final approval of such courses will not occur until finalization of this new fee. The Board determined that it is appropriate for all courses to be offered for calendar year 2005 and later to be subject to the same fee provisions, in order to provide for even-handed treatment. Therefore, the Board adopted the new training unit approval fee provisions on both an emergency and permanent basis.

EMERGENCY FINDINGS

On an emergency basis, the training unit course approval fee shall become effective November 30, 2004, and shall remain effective on an emergency basis until it becomes permanently effective on January 30, 2005 pursuant to section 24-4-103(5), C.R.S.. The Board further determined that this result is appropriate and should not result in hardship to course sponsors. This rulemaking was initiated in October 2004 after complying with the usual notice requirements. Possible approaches to the training unit approval fee were discussed at the October 2004 hearing and interested parties had an opportunity to discuss and comment on the proposal. In addition, December 30, 2004 would have been the normal effective date had final action been taken at the October 2004 hearing at the same time as the remainder of the proposed rule. Course sponsors have been aware of the intent to establish a new training unit approval fee for 2005 courses and relying on the usual effective date would now result in unequal treatment in favor of course sponsors that submitted applications for approval of 2005 courses prior to the effective date. Therefore, the Board finds that immediate adoption of these revisions to Regulation No. 100 is imperatively necessary to preserve public welfare and that compliance with the requirements of section 24-4-103(5), C.R.S. would be contrary to the public interest.

100.42 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE: JULY 26, 2005 RULEMAKING

The provisions of sections 25-9-104(3) and 25-9-104(4), C.R.S., provide the specific statutory authority for the adoption of these regulatory provisions. The Board also adopted, in compliance with section 24-4-103(4), C.R.S., the following statement of basis and purpose.

BASIS AND PURPOSE

The Board adopted revisions to the drinking water treatment facility classification system in section 100.4 of this regulation in order to more precisely define some classifications, to broaden classifications to include newer technologies, and to remove certain inconsistencies in the former classifications. The classification categories have been indexed for clarity.

Ground Water Systems: Subsections 100.4.2(a) through (c).

Subsection 100.4.2(a). The deletion of footnote #2 is reflective of the Board's recognition that a level "1" water distribution system operator should have sufficient knowledge and skill to supervise a small ground water system that operates with a waiver of disinfection.

Subsection 100.4.2(c). The Board clarified that treatment technologies other than what may be commonly connoted by the term "filtration" are encompassed by the regulation. The Board also recognized that chemical addition to improve the aesthetic quality of drinking water (secondary drinking water standards as listed in 40 CFR 143) ordinarily should not raise the classification of a system beyond

the “C” level. Ground water systems with treatment techniques or chemical additions, other than disinfection, that are used for the specific purpose of meeting primary drinking water requirements (40 CFR 141) should be classified under the criteria in subsection 100.4.2(g).

All Water Systems: Subsections 100.4.2(d) through (f).

Subsection 100.4.2(d). The Board intends that small, simple water systems that require filtration in addition to disinfection be classified a “D” systems only if the system utilizes disposable filters, i.e., filters that do not require periodic backwashing or other maintenance and which must be disposed of when they lose their effectiveness. The Board has determined that the type of disinfection utilized should not be restricted to non-gaseous chlorine and has deleted that qualifier from the regulation.

Subsection 100.4.2(e). The Board recognizes that the expertise required to operate water systems that use a variety of filtration and other treatment technologies (other than disposable filters or direct or conventional filtration) in order to meet primary drinking water standards is often equivalent to the skill required to operate water systems using the same techniques to improve the aesthetic quality of water. The classification of such systems is intended to be “C” for smaller systems. However, because of the enhanced public health risk in the case of system failure, the Board intends that the increase in classification level with size be accelerated for systems using filtration and other technologies to meet primary standards.

Subsection 100.4.2(f) Primary treatment techniques that incorporate or depend upon additional chemical treatment in order to function properly are intrinsically more complex to operate. An example of such a system would be a conventional filtration system, which ordinarily requires the additional steps of chemically aided coagulation and flocculation. The terms “conventional filtration” and “direct filtration” are defined in the Colorado Primary Drinking Water Regulations, articles 1.5.2(21) and 1.5.2(30), March 30, 2005, respectively. These definitions are intended to apply to Regulation 100, section 100.4.2(f). Such systems have significant monitoring, testing and adjustment requirements. The Board intends that systems utilizing any filtration technique or other treatment technology that, in and of itself, requires additional chemical treatment in order to meet primary drinking water requirements have an initial classification of “B”.

Chemical Addition: Subsections 100.4.2(g) through 100.4.2(i).

Subsection 100.4.2(g). Secondary drinking water standards have defined “secondary maximum contaminant levels”, SMCLs, which are non-enforceable (40 CFR 143). The Board intends that chemical addition for the specific purpose of meeting secondary drinking water standards, such as iron and manganese control, pH control, or water softening, should not affect the classification of a level “B” or “C” water system. Level “D” systems utilizing chemical addition for the specific purpose of meeting secondary drinking water standards should be individually evaluated under the authority of section 100.4.1 to determine the appropriate classification.

Subsection 100.4.2 (h). The Board intends that this classification category apply to systems that, in addition to the primary treatment process, utilize chemical treatment for the specific purpose of meeting the enforceable “maximum contaminant level” requirements for primary contaminants (40 CFR 141). An example of such a chemical treatment would be the use of lime softening for the specific purpose of controlling radionuclides. The Board also intends that disinfection is not to be considered as an “additional chemical treatment” within the meaning of Regulation 100, subsection 100.4.2(h).

Subsection 100.4.2(i). Although lead and copper are contaminants of special concern, they differ from most primary drinking water contaminants in that (1) they commonly occur in the distribution system, not in the source water; and (2) the methods of treatment for lead and copper are relatively non-complex. The Board, therefore, intends that systems that treat for lead and copper in the distribution system (a process commonly referred to as “corrosion control”) have a minimum classification of “C”. Should treatment be necessary because of the contamination of source water with lead and copper, a higher

classification may be appropriate. The Division should evaluate such systems to determine whether an application of section 100.4.1(b) is appropriate.

Subsection 100.4.2(j). The Board intends that any water system utilizing fluoridation have a minimum classification of “C”, hence the designation of chlorination as a companion process to fluoridation has been deleted.

Multiple Treatment Processes: Subsection 100.4.2.4.

Systems utilizing multiple water treatment processes should be classified in accordance with the most complex process regularly used. This regulation already contains a parallel requirement for domestic and industrial wastewater systems, sections 100.5.4 and 100.6.4, and the Board has determined that the requirement should be included as part of the drinking water classifications.

100.43 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE: FEBRUARY 14, 2006 RULEMAKING

The provisions of sections 25-9-104, C.R.S., provide the specific statutory authority for the adoption of these regulatory provisions. The Board also adopted, in compliance with section 24-4-103(4), C.R.S., the following statement of basis and purpose.

BASIS AND PURPOSE

The Board adopted revisions to a variety of provisions in this regulation in order to clarify the intent of certain provisions and to incorporate within the regulation the definitions of terms commonly used in the water and wastewater industries.

Definitions: Section 100.2.

Subsections 100.2(1), (7), and (9). The Board includes the definitions of “Bag or Cartridge Filters”, “Conventional Filtration Treatment”, and “Direct Filtration Treatment” in order to standardize the understanding of these treatment techniques as used in the water treatment facility classifications of subsection 100.4.2 of this regulation. The Board intends that these definitions be interpreted in a manner consistent with the Colorado Primary Drinking Water Regulation (5 C.C.R. 1003-1).

Subsection 100.2(17). The definition of “Plant Design Flow” is added to this regulation in order to clarify that the classification of a water or wastewater facility is to be based upon the capacity of the facility, as approved by the Division, and not upon the actual production of the facility.

Subsections 100.2(18) and (20). Definitions of “Primary Drinking Water Requirements” and “Secondary Drinking Water Standard” are included in order to remove the incorporation by reference of these terms in subsections 100.4.2(d),(e),(f),(g) and (h) of this regulation.

Subsection 100.2(23). The Board intends to clarify that the “Transient Non-Community” operator certification level, as described in subsection 100.19.2 of this regulation, covers only a specific subset of transient non-community public water systems.

Subsection 100.2(25). The Board intends that the term “validated examination”, as used in section 100.11 of this regulation, be interpreted in a manner consistent with the federal guidelines for facility operator certification examinations (Federal Register, Vol.64, No. 24; February 5, 1999.)

Water Facility Classification: Subsection 100.4.2

Subsections 100.4.2(d),(e),(f),(g) and (h). Cross-references to provisions of the Code of Federal Regulations are deleted by this amendment. The definitions of the previously cross-referenced terms are explicitly added to this regulation as subsections 100.2(18) and (20).

Subsection 100.4.2(k). The criterion for the classification of water vending machines is amended to be consistent with the terminology used in other facility classifications in section 100.4.2 of this regulation.

Qualifications and Classifications for Certification of Operators: Section 100.9

Subsections 100.9.2 and 100.9.3. The Board intends that a demonstration, by the applicant for a certification examination, of skills equivalent to the General Equivalency Diploma (GED) may be substituted for the requirement that an applicant hold either a high school diploma or a GED.

Subsections 100.9.4 and 100.9.8(a)(iv) and (b)(iv). The Board intends to clarify that once specific experience or education is used by an applicant to fulfill a requirement for certification, that same experience or education may not be used to meet any other requirement for the same certification.

Application for Certification: Section 100.10

Subsections 100.10.4, 5, and 6.

The Board intends to clarify the process by which an applicant may request a re-review of his or her application. All application denial notices should include the specific grounds upon which the application was denied. Such notices should include sufficient detail to allow the applicant to supply relevant supplementary information to the Board's designee in a timely manner.

The timeframes allowed for an applicant to request an application re-review or to request an appeal of an application denial are specified.

The Board intends that all material to be considered during a re-review or during an appeal must be submitted at the time of the request for re-review. Appeals to the Board will be evaluated based upon the material available during the re-review of the application. Material submitted after the re-review will not be considered by the Board at an appeal hearing, unless the operator provides a showing why such information could not have been submitted earlier in the process.

Education and Cross Experience Substituted for Experience Requirements: Section 100.12

Subsection 100.12.1(a). The Board intends to clarify that any education credit claimed as a substitute for experience must be post-secondary education. The Board intends that education obtained at institutions such as community colleges and post-secondary technical schools is acceptable.

Subsections 100.12.1(b) and (c). The Board intends to clarify that an approved and completed program, for which the applicant has received a diploma or certificate, is to be counted as a whole when used as a substitute for education. Experience equivalencies should be credited as specified in subsection 12.1(a). Only when an approved course of study has not been completed should the relevancy of individual courses be evaluated and a course-by-course determination of equivalency determined.

Certificates: Section 13

Subsection 100.13.7. The Board deleted this subsection as not necessary to this regulation.

Training Unit Requirements for Renewal of Certification: Section 100.14

Subsection 100.14.1. The Board recognizes that many training courses are approved for credit in multiple fields. While an operator may not count the same material twice toward the renewal of a single certification, the Board intends that operators be granted credit for the full time he or she attended a course. For example, a water treatment operator attends a six-hour course offering 0.4 Training Units (TUs) in water treatment and 0.6 training units in water distribution. For the renewal of a water treatment certification, the operator may count a total of 0.6 TUs for the course: 0.4 TUs may be counted toward the core requirement in water treatment and 0.2 TUs of the credit approved for water distribution may be counted as “outside the field” credit.

100.44 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE: APRIL 24, 2007 RULEMAKING; ADOPTED JULY 31, 2007; EFFECTIVE SEPTEMBER 30, 2007

The provisions of sections 25-9-104 and 25-9-108, C.R.S., provide the specific statutory authority for the adoption of these amendments to the established regulatory provisions of Regulation 100 (5 CCR 1003-2). The Board also adopted, in compliance with section 24-4-103(4), C.R.S., the following statement of basis and purpose.

BASIS AND PURPOSE

Subsections 100.9.2 and 100.9.3. It is the intention of the Board to reflect the intent of the Environmental Protection Agency (EPA) regarding the substitution of education and/or experience for the general prerequisite that a high school diploma or general equivalency diploma (GED) be held by all candidates for certification. EPA intends that candidates not meeting this prerequisite have education and/or experience beyond that which is required of other candidates. The Board has amended subsections 100.9.2 and 100.9.3 to clarify that (1) the GED is the only automatically acceptable alternative to a high school diploma and that (2) for candidates lacking a high school diploma or GED, there will be an additional experience and education requirement in order to qualify for examination. The choice of a six month period of additional experience is intended to reflect the experience equivalent of a full semester of academic credit as described in section 100.12.1(a) of this regulation.

Subsections 100.12.1(b)(i) and 100.12.1(c). While recognizing the value of all post-secondary education, the Board has revised these sections of the regulation to provide that programs or courses acceptable as a year-for-year substitute for up to 50% of the direct experience requirements of this regulation be limited to those that the Board has determined are directly relevant to the operation of water and wastewater facilities. The previous version of Regulation No. 100 allowed any “technically oriented” courses or programs to substitute for up to 50% of the experience requirement. Addition of the “directly relevant” language reflects the Board’s intent to be more specific with respect to the types of programs or courses that may receive credit. The Board has adopted language from an ABC report on operator certification program standards to provide examples of the types of courses or programs that would be considered “directly relevant”. The Board intends that its contractors will apply this provision in the first instance, subject to appeal and final determination by the Board.

Subsection 100.12.1(b)(ii). Although a degree that does not meet the criteria of section 100.12.1(b)(i) does not provide the specific background skills for entry into the water and wastewater professions, the Board recognizes that applicants who have completed a post-secondary degree program have demonstrated a set of learning abilities which should enable them to more efficiently acquire many of the skills normally developed by hands-on experience. The Board has determined, therefore, that a 25% education credit toward meeting the experience requirement is appropriate for applicants holding post-secondary degrees, regardless of the fields in which the degrees are granted.

Subsection 100.13.8. This section is deleted as duplicative of subsection 100.13.7.

Subsection 100.22.2. The Board has revised subsection 100.22.2 to modify the examination and administration fees. The previous \$35.00 examination fee is inadequate to cover the actual cost of certification exams provided by ABC, including preparation and administration of those exams.

Additionally, the previous administration fee of \$50.00 is inadequate to cover the costs incurred in maintaining the database of operators, issuing and mailing certificates and other correspondence. The Board agrees with the CECTI and Certification Council proposal that it is more appropriate to increase the examination fee (to \$45.00) and to increase the administration fee (to \$55.00) for those obtaining a new certification by examination. The net result will be an increase of \$15.00 in total fees for those passing a certification examination to obtain a new certification at a higher level. Those who take an examination and fail will incur a \$10.00 increase.

The Board also agrees that it is appropriate to increase the administration fees at this time for those obtaining renewal certifications or certification by reciprocity from \$60.00 to \$70.00 to cover administrative costs. The Board also determined that it is appropriate to add a \$20.00 fee to cover the cost of providing replacement certification documentation.

Water Distribution and Wastewater Collection Classifications

A. Operator Certification Levels

The Board has revised subsection 100.9.7 to include a level 3 certification requiring 3 years experience. Further, the Board has agreed to recognize current Class 3 operators as Class 4 operators and authorizes the issuance of operator certificates reflecting Class 4 certification. The Board has determined that this is appropriate, based on the four-year experience requirement previously in place for Class 3 operators and based on the content of the previous Class 3 examinations. Any current restricted Class 3 collection and distribution certification would become a restricted Class 4 certification.

B. System Classifications

The Board has revised subsections 100.7.2 and 100.8.1 to modify the current Water Distribution and Wastewater Collection Systems classification tables to address the complexity of very large systems. Class 3 systems will be changed from serving populations greater than 25,000 to serving populations from 25,001 to 100,000. The Board has added a Class 4 classification that serves populations greater than 100,000.

Corresponding revisions have been adopted for sections 100.14 and 100.21.

100.45 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE: APRIL 28, 2009 RULEMAKING; ADOPTED APRIL 28, 2009; EFFECTIVE JUNE 30, 2009

The provisions of section 25-9-104(4), C.R.S. (2008), provide the specific statutory authority for the adoption of these amendments to the established regulatory provisions of Regulation 100 (5 CCR 1003-2). The Board also adopted, in compliance with section 24-4-103(4), C.R.S., the following statement of basis and purpose.

BASIS AND PURPOSE

Subsection 100.2(12). The Board added a definition of "Responsible Person" that sets requirements for persons charged with the responsibility for supervising Class 2 industrial wastewater operations and for ensuring compliance with the facility's discharge permit requirements. The Board intends that such persons receive adequate and ongoing training in areas relevant to their responsibilities, such as specific measures used to meet effluent limits, monitoring, inspection, planning, reporting, and documentation requirements.

Subsection 100.2(18). The Board adopted a definition of "Passive Wastewater Treatment" that parallels the statutory language of section 25-9-104(4)(d), C.R.S.

Subsection 100.6.1. The Board adopted this amendment to Regulation 100 to implement the provisions of section 25-9-104(4), C.R.S., as amended by the Colorado General Assembly in 2008. The Board recognizes that there are wastewater treatment activities in Colorado that require only passive treatment in order to meet Colorado Discharge Permit System (“CDPS”) effluent limitations. The Board also recognizes that many of these activities are currently managed under a variety of Best Management Practice (“BMP”) requirements. Additionally, the Board recognizes that it is current practice in many of these industrial activities to place the facility/activity under the supervision of an environmental professional responsible for effluent quality, for overseeing monitoring, and for ensuring timely and accurate discharge monitoring reporting.

In light of the above considerations, the Board divided permitted industrial wastewater facilities into two distinct classes. Class 2 facilities shall not be subject to the requirements to operate under the supervision of a certified operator. The Board maintained the requirement for all industrial wastewater facilities not classified as class 2 facilities to remain subject to the requirements of Regulation 100 to operate under the supervision of a certified operator and designated these facilities as class 1 facilities.

Subsection 100.6.1(b)(i). The Board has determined that facilities/activities which discharge solely under the authority of stormwater permits shall be classified as class 2 facilities without the need for specific Board action other than the adoption of this amendment to Regulation 100. The Board recognizes that such facilities utilize only passive treatment or no treatment of stormwater and are subject to significant requirements, including the filing of and adherence to Stormwater Management Plans. The Board has determined that facilities subject to stormwater discharge permits are appropriately classified as class 2 pursuant to the criteria in section 25-9-104(4) C.R.S. since these discharges generally do not contain substantial concentrations of toxic pollutants and do not require chemical, mechanical, or biological treatment. The Board intends that the designation as class 2 shall include facilities discharging under the authority of municipal stormwater permits, industrial stormwater permits and construction stormwater permits. The Board does not grant automatic class 2 classification to facilities discharging under the authority of combined process water and stormwater permits.

The Board has further determined that facilities/activities discharging pursuant to the Water Quality Control Division’s “Low Risk Discharge Policy” shall be classified as class 2 facilities. The Board recognizes that the discharge from such activities is considered to pose minimal risk of environmental degradation. Such discharges generally do not contain substantial concentrations of toxic pollutants and do not require chemical, mechanical, or biological treatment. The Board further recognizes that water distribution systems holding “Treated Water Distribution System” permits are already required to be under the direct supervision of certified water distribution system operators whose training and certification criteria include the handling of the type of discharges covered under these permits. Similarly, water treatment facilities holding “Water Treatment Plant Discharge” permits are already required to be under the direct supervision of certified water treatment operators whose training and certification criteria include the handling of the type of discharges covered under these permits.

Subsection 100.6.1(b)(ii). The Board recognizes that there are additional CDPS general industrial discharge permits whose effluent requirements can ordinarily be met by utilizing, at most, passive treatment techniques. These general industrial permits are listed within the amendment in subsection 100.6.1(b)(ii). The Board has provided that facilities holding these discharge permits shall be recognized as class 2 facilities based upon the Water Quality Control Division’s verification of a facility’s written certification that effluent limitations can be met utilizing only passive treatment and that the facility is under the supervision of a responsible person as defined in subsection 100.2(21) of this regulation. Verification by the Division will serve to confirm that a facility qualifies as a class 2 facility consistent with the classification determinations made by the Board in revisions to Regulation 100. The Board intends that the Division retain a record of such classifications. The Board recognizes that facilities denied a class 2 classification may appeal the Division’s determination to the Board pursuant to section 100.24 of this regulation.

Subsection 100.6.1(b)(iii). The Board further recognizes that certain facilities are required to hold individual industrial discharge permits rather than general industrial discharge permits. Individual permits are usually required either because of the sensitivity of the receiving waters, the nature of the effluent, or the complexity of the treatment required in order to meet effluent limitations. The Board has reserved to itself the authority to grant a class 2 classification to such facilities. The Board has provided that such facilities may submit a request for reclassification to the Board. This request shall include a demonstration that the facility's operations meet the applicable considerations of section 25-9-104(4), C.R.S.; that effluent limitations can be met utilizing only passive treatment; and that the facility is under the supervision of a responsible person as defined in subsection 100.2(21) of this regulation. The Board will forward the material submitted with the request to the Division for evaluation and recommendation. The Board will approve or deny such requests at an adjudicatory hearing at a regular Board meeting.

The Board recognizes that there are certain general industrial permits that authorize discharges from types of activities which are inherently more complex than those described in section 100.6.1(b)(ii) above. It is the Board's intention that facilities discharging under the authority of general permits other than those listed in subsection 100.6.1(b)(ii) should follow the reclassification procedure outlined for facilities holding individual industrial discharge permits.

Conditions Applicable to Subsections 100.6.1(b)(2) and 100.6.1(b)(iii). In order to ensure that facilities meet the requirements for class 2 classification on a continuing basis, the Board has provided that each facility classified as a class 2 facility under subsection 100.6.1(b)(ii) or subsection 100.6.1(b)(iii) shall submit an annual certification confirming that the conditions under which its classification was granted are still being met and that ongoing annual training has been provided to the designated responsible person. The Board does not intend that a detailed accounting of the nature or timing of such training be submitted with each annual certification.

The Board may reclassify a class 2 facility to class 1 if that facility fails to meet 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.

**100.46 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE:
SEPTEMBER 29, 2009 RULEMAKING; ADOPTED SEPTEMBER 29, 2009; EFFECTIVE
NOVEMBER 30, 2009**

The provisions of section 25-9-107, C.R.S., provide the specific statutory authority for the adoption of these amendments to the established regulatory provisions of Regulation 100 (5 CCR 1003-2). The Board also adopted, in compliance with section 24-4-103(4), C.R.S., the following statement of basis and purpose.

BASIS AND PURPOSE

Subsection 100.6.1. The Board added subsection 100.6.1 in April 2009 to implement the provisions of section 25-9-104(4), C.R.S., as amended by the General Assembly in 2008. The Office of Legislative Legal Services, which conducts legal reviews of all newly-promulgated agency rules, subsequently expressed concerns regarding the apparent "incorporation by reference" of the Division's Low Risk Discharge Policy in subsection 100.6.1(b)(i)(B). Based on these concerns, the Board decided as part of this rulemaking proceeding to delete subsection 100.6.1(b)(i)(B) (and to re-number the subsection accordingly).

The Board's initial intent in referencing the Division's Policy was to categorically exempt such facilities from the certified operator requirement because of their low risk of impacting the quality of state waters. The Board and the Division have agreed that the Board's intent can be accomplished alternatively through language in the Division's Low Risk Discharge Policy itself. Thus, the Low Risk Discharge Policy will soon be amended to state that the Division will use its enforcement discretion with respect to facilities which do not have a certified operator, where such facilities can prove that they are discharging pursuant

to the Policy and implementing the best management practices outlined in the related guidance documents.

Subsection 100.13. The Board recognizes that section 25-9-107, C.R.S., refers to the “award” of a certificate, that certificates shall be “awarded for a period of three years”, and that the timing of automatic revocation for non-renewal is referenced to the “expiration date” of the certificate. Earlier versions of this regulation, however, reference the date of automatic revocation of a certificate to the “issue” date. Because certificates may not always be issued exactly three years prior to the expiration date, this difference in language is significant.

The Board has, therefore, chosen to align the language of subsection 100.13 of this regulation more closely with the language of the governing statute and refer the three year validity period of all certificates either to the date of “award” (for new certificates) or to the date of expiration of the previous certificate (for renewed certificates). It is clarified that renewed certificates are valid for three years from the date of expiration of the certificate being renewed and not from the date of issue of the renewal certificate.

The Board further determined to adopt language which clarifies that the date of issue of a certificate does not determine the date on which a non-renewed certificate is automatically revoked. The Board intends to clarify that certificates shall be automatically revoked if not renewed within two years of the expiration of the certificate.

100.47 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE: NOVEMBER 2009 RULEMAKING; ADOPTED NOVEMBER 24, 2009; EFFECTIVE JANUARY 30, 2010

Provisions of section 25-9-108, C.R.S., provide the specific statutory authority for the adoption of these amendments to the established regulatory provisions of Regulation 100 (5 CCR 1003-2). The Board also adopted, in compliance with section 24-4-103(4), C.R.S., the following statement of basis and purpose.

BASIS AND PURPOSE

A. New and Revised Fees.

The Board has revised section 100.22.2 to modify the current examination fees by establishing a \$35.00 fee for online testing. Examination fees currently cover the costs associated with certification when certification examinations are taken in a written format during the regularly scheduled examination periods. Recent advances in technology have now made it possible to offer certification examinations in an electronic format. While this technology offers advantages in the form of convenience, enhanced security and immediate results, there are added costs associated with this form of testing. These costs include added cost for the setup and maintenance of the electronic testing system and the cost of administering and staffing an examination facility. The Board concludes that since electronic testing is an option offered for the convenience of the applicant, the added costs associated with this form of testing should be met by the assessment of a fee specific to electronic examinations and should not be met by an increase in the existing examination fee.

B. Other Revisions

The Board has also revised sections 100.9.6, 100.9.8, 100.11.1, 100.11.3, and 100.13.8 to modify references to “written examinations” in order to accommodate electronic testing.

100.48 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE: NOVEMBER 2011 RULEMAKING ADOPTED NOVEMBER 29, 2011; EFFECTIVE JANUARY 30, 2012

Provisions of section 25-9-108, C.R.S., provide the specific statutory authority for the adoption of these amendments to the established regulatory provisions of Regulation 100 (5 CCR 1003-2). The Board also adopted, in compliance with section 24-4-103(4), C.R.S., the following statement of basis and purpose.

BASIS AND PURPOSE

The Board determined that it was necessary to revise Regulation 100 to reflect a change in its testing policy which, before this hearing, consisted of requiring operators to take standard "multiple entry" exams to acquire certification for the various classes within the certification categories. The material on such exams covers the lower levels or classes within a certification category up to the certification level sought. The Board is now changing to a "sequential" testing scheme; each test focuses on the material for a particular class/level of certification within each certification category. Operators will now be required to hold a certification in the class immediately below the class for which the application is being made, and thus the operators will not be able to "skip" any classes of certification in progressing to the higher classes. The Board has determined that it is prudent to make this change in policy for the following reasons.

The Board agrees with recent findings by the Association of Boards of Certification (ABC) that there are certain deficiencies with the multiple entry exam approach. For example, operators who passed the Class 4 Distribution exam by doing very well with the lower level exam questions could actually do very poorly on the questions specific to Class 4. This indicates that the multiple entry approach may not provide an accurate indication of proficiency in the skills required of a Class 4 Distribution operator. For this reason, ABC is no longer developing standardized multiple entry exams for their clients.

Additionally, the Board was persuaded by the results of an analysis by a psychometrician hired by its Contractors to evaluate knowledge required of Colorado's operators for the various certification categories and the classes within each. Exam blue prints have been developed which support the use of sequential testing because some areas of knowledge are tested more thoroughly at a lower level than at an upper level. The Board also considered the issue of reciprocity, as there will be very few, if any, states using multiple entry exams by the end of 2011. The Contractors' reciprocity committees will benefit from a sequential testing scheme because it will allow an equal comparison of Colorado's testing requirements with those of other states.

Accordingly, the Board added new section 100.9.7 to include the new requirement that in order to qualify to sit for an exam, an applicant must hold a certification for the same category and in the class immediately below the class for which the application is being made. The Board also revised the corresponding "Prior Certification and Experience Requirements" table in section 100.9.8 to consolidate and simplify the explanation of the experience requirements for the various certification categories and classes within each. Minor revisions were also made to section 100.9.6 for consistency with the other changes.

The Board agrees with the Contractors' assessment that relatively few operators will be impacted by this change in testing policy, as most operators already gain the required experience and take examinations with the intent to advance sequentially through a particular certification category. For those few operators who currently have the requisite experience to bypass lower level exams and may wish to skip to higher class of certification, they should be able to obtain their desired level of certification in an expeditious manner. The Contractors have indicated to the Board that, beginning in 2012, they will be expanding from their current offering of two examination cycles per year to three cycles. This added exam cycle will allow operators who meet higher level experience requirements to go through the sequential testing process more quickly in order to obtain their desired level of certification.

100.49 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE: FEBRUARY 2012 RULEMAKING; ADOPTED APRIL 24, 2012; EFFECTIVE JUNE 30, 2012

Provisions of section 25-9-108, C.R.S., provide the specific statutory authority for the adoption of these amendments to the established regulatory provisions of Regulation 100 (5 CCR 1003-2). The Board also adopted, in compliance with section 24-4-103(4), C.R.S., the following statement of basis and purpose.

BASIS AND PURPOSE

The Board determined that it is necessary to revise Regulation 100 to reflect the following changes:

Generally, the Board added clarifications where appropriate, deleted obsolete language, corrected referenced citations, and made grammatical corrections. Stylistic changes throughout the text of the regulation were made for uniformity and clarity. Where possible, the Board reorganized and combined like requirements into unified sections, i.e., section 100.9.9 describing the special rules for satisfying the minimum experience requirements for Class D, Class 1, Class S and Class T certifications. Because the minimum experience requirement is the same for all three classes, sections 100.9.9(a), 100.9.9(b), and 100.9.6 have been combined into 100.9.9.

Section 100.1. For consistency with other Department regulations, the Board added reference to the specific statutory authority of the Board to promulgate regulations.

Section 100.2. The Board added definitions for the “Colorado Discharge Permit System Regulation” and the “Colorado Primary Drinking Water Regulations;” modified the definition for “public water system” to be consistent with the definition in the “Colorado Primary Drinking Water Regulations;” deleted language in the definition of “operator” that was redundant with the section of the regulation pertaining to certified operator duties; deleted the definition for “small system” because this classification was renamed “Class S” in this rulemaking; deleted the definition for “transient non-community certification” because this term is no longer used; and modified the definition of “water treatment facility” to match the statutory definition, 25-9-102(7), C.R.S.

Sections 100.4.1, 100.5.1, 100.7.1 and 100.8.1. The Board recognizes the confusion resulting from the use of like terms, specifically: 1) transient non-community water system, transient non-community water system operators certification, and transient non-community water system facility classification; and 2) small system under the Colorado Primary Drinking Water Regulations, small water system operators certification, small wastewater system operators certification, small water system facility classification and small wastewater facility classification. Because transient non-community water systems, small water systems, and small wastewater systems are subcategories of Class D water or wastewater treatment facilities with a Class 1 water distribution or wastewater collection system rather than distinct facility classifications, they have been removed as facility types.

Accordingly, the Board revised sections 100.4.1, 100.5.1, 100.7.1, and 100.8.1 to remove references to transient non-community system, small water system, and small wastewater system from the respective lists of facility classifications, and corrected the number of facility classification types in each section; and the sentence preceding the table in section 100.7.2 referencing small water system and transient non-community water system facility classifications was also deleted.

For clarity, the Board also changed the names of the following operator certifications: transient non-community systems to “Class T,” small water system to “Class S,” and small wastewater system to “Class S.” Sections 100.9.2 (d), (e), and (f), containing requirements for certification by examination, define when Class T and Class S certifications are valid to operate a Class D/Class 1 facility.

Section 100.6. The Colorado Discharge Permit System is a self-reporting program, and the Board recognizes that large numbers of the permits issued to facilities that meet the requirements for the Class 2 industrial facility exemption under Regulation 100 are never used or are effective for only short periods of time. The Board also recognizes the inability of the Division to verify on an annual basis each facility’s certification that it meets the requirements for the Class 2 industrial facility exemption.

Accordingly, the Board simplified the exemption process for Class 2 industrial facilities to reduce the regulatory reporting burden on the Division and on businesses operating within the State. A provision requiring facilities to notify the Division when they no longer meet the requirements of the exemption was added to ensure timely transition to operation under the supervision of a certified operator. The Board also added the new general "Pesticides" permit to section 100.6.1(b)(i)(C), and removed the specific industrial general permit numbers to prevent the need to modify the regulation each time the Division discontinues or adds to the permit numbering schema for the identified activity types.

Section 100.9, 100.10, 100.11, 100.12, 100.13, 100.14, 100.15, 100.16, 100.20, 100.21. The Board added language to clarify and to incorporate language from its policies and procedures regarding the following topics: certification requirements; minimum education and experience requirements; criteria for evaluation of experience; application procedures; substitution for the experience requirements; approval of training units, educational courses, and institutions; procedures for purchase of new certificates, renewal of certificates, and certificates by reciprocity; training unit requirements for renewal of certification; expired certificates; duties of certified operators duties of operators in responsible charge; facility owners' responsibilities, including the role of contract operators; and disciplinary actions, including clarified terminology and procedures.

Section 100.9.3 and 100.13.1. The Board recognizes the issues many small facilities face in ensuring they have trained certified operators. The Board also recognizes that the certified operator profession has an aging work force, and wishes to encourage dedicated young people to enter the profession. Accordingly, the Board added specific language regarding the examination and certification requirements for applicants participating in an approved high school program to encourage them to enter the water and wastewater fields. Specifically, the revised language allows a student to sit for an entry level certification examination prior to graduation from high school, with the provision that the certification will only be issued when the examinee successfully passes the examination and submits proof of graduation.

Section 100.13.1 The Board added a deadline of three years from the date of notification of certification eligibility to apply for the certificate. It is the Board's intention that after the three year deadline has expired, an individual would need to re-apply and retake the examination.

Section 100.13.5(a). The Board added the requirement that in order to obtain a certificate by reciprocity, persons passing exams in other states, territories, or countries must also acquire qualifying experience in the state, territory, or country in which they obtained their certificate. The Board wishes to maintain Colorado's high standards for operator certification, and this requirement is intended to deter persons (particularly Colorado-based operators) from taking certification exams in other states, territories, or countries as a means to more easily obtain a Colorado certification. The Board currently requires that exams taken in other states by reciprocity applicants must be adequate, validated, and "of a standard not lower" than Colorado's. The Board believes, however, that this additional requirement will help streamline the reciprocity process and make it less subjective in situations where an applicant could have taken an exam in Colorado, but instead chose to take it elsewhere with the intent to find a less challenging exam.

Section 100.14.2. For ease of reference, the Board consolidated the training unit requirements that were previously listed in narrative in this subsection into a table.

Section 100.18. The Board added the responsibility for a facility owner to ensure the employment agreement with a certified operator reflects the requirements of an operator in responsible charge. The Board also defined the decisions reserved to the operator in responsible charge and modified the reporting requirements of facility owners.

Section 100.18.5. For consistency with other changes in the regulation, references to Class S and Class T were added to the table regarding criteria for operators in responsible charge.

Section 100.19. In provisions regarding administration fees, the Board clarified that there is no additional fee for a standard 6 x 9 inch certificate, but that an additional fee of \$5.00 will be charged for operators

who opt for a larger size of certificate. Operators have had this option since 2008, but the Board believes it is appropriate to formalize this practice through its Regulations. The Board determined that the additional fee is necessary to cover postage and other incidental administrative costs associated with the larger certificate. The Board also added a \$50 late fee for purchases of certificates 61 or more days after the date of the letter notifying the applicant of eligibility to receive certification and for renewal of a certificate after the expiration date. The Board found that the \$50 amount is necessary and appropriate to cover administrative costs associated with delays in application for certification or certification renewal.

Section 100.21. For consistency with other Department regulations, the Board defined a timely appeal to the Board as submitting the request for hearing within thirty (30) days of notice of a decision by the Board's designee or the Division.

Section 100.25. This section regarding "Transitional Renewal Training Unit Requirements" was removed as obsolete.

The Board postponed the adoption of proposed sections 100.16.3(g), 100.16.3(h) and 100.16.4(a)-(f) regarding requirements for delegation of duties to uncertified personnel until a later rulemaking to allow time for additional stakeholder input.

100.50 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE: APRIL 29, 2014 RULEMAKING ADOPTED AUGUST 26, 2014; EFFECTIVE OCTOBER 30, 2014

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 (5 CCR 1003-2). The Board also adopted, 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 April 29, 2014. After receiving testimony from the Division, CECTI, and members of the public, the Board voted to continue the hearing until its August meeting with direction to the Division to work with stakeholders in developing a revised proposal regarding the definitions of "certified operator" and the associated terminology. At the hearing in August, the Board adopted the Division's revised proposal regarding the certified operator terminology, which was discussed and agreed to by the various stakeholders. As discussed in more detail below, the Board determined that the Division's revised proposal helps to clarify the roles of "operators," "certified operators," and "certified operators in responsible charge," while maintaining consistency with the statutory definition of "certified operator." The Board further determined that it was necessary to revise Regulation 100 as follows:

Generally, the Board added clarifications where appropriate, deleted obsolete and redundant language, corrected referenced citations, and made grammatical corrections. Stylistic changes throughout the text of the regulation were made for uniformity and clarity. Where possible, the Board reorganized and combined like requirements into unified sections. Additionally, there were many instances where the term "certification" was used when the reference was more accurately referring to a "certificate." In those instances, "certification" was changed to accurately refer to a "certificate."

Section 100.1.1. The Board revised the statutory citation to match current practice.

Section 100.2. The Board revised the term "certified operator" to be consistent with the common understanding of this term within the profession. Accordingly, the Board now defines this term as including all operators in Colorado who hold a Certified Water Professional ("CWP") certificate. To accomplish this, within its definition of "certified operator," the Board revised its interpretation of an operator's having "responsibility for the operation" of a facility. The Board's previous interpretation referred only to those operators who were in charge of making process control and/or system integrity decisions that may affect public health or the environment. The revision construes the term more broadly

to include all CWP's who, by virtue of holding a certificate, are qualified to perform various operational responsibilities at a facility.

The previous term "operator in responsible charge" was deleted and replaced with "certified operator in responsible charge." The Board determined that the new term was more appropriate to reflect the status of such operators. Within the definition, the Board clarified that "certified operators in responsible charge" have a higher level of responsibility at facilities because they are in charge of making process control/and or system integrity decisions that may affect public health or the environment. The Board also clarified its endorsement of the long-standing practice that facility owners may designate more than one person as the certified operator in responsible charge.

Finally, the definition of "operator" was revised to indicate that it is a general term that includes persons who may or may not hold a CWP certificate, and to delete the unnecessary word "supervises" to alleviate any confusion as to the general responsibilities or qualifications of an "operator." The Board made revisions to terminology throughout the regulation to be consistent with these changes to the definitions of "certified operator," "certified operator in responsible charge," and "operator."

Additionally, the Board moved definitions that are only used once in the regulation to the section of the regulation where the term is used. The definitions of "Board," "certificate," "department, and "domestic wastewater treatment facility" were changed to match the statutory definitions, and clarifying language was added to the term "training unit." The Board removed the definitions of "community water system," "non-transient community water system," and "non-community water system" because these terms are not specific to Regulation 100, and they are defined in the Colorado Primary Drinking Water Regulations, 5 CCR 1002-11.

Section 100.4. The Board removed as unnecessary the terms "community," "non-transient community," and "transient non-community" water systems in the section 100.4.2 table heading. In accordance with authority granted in § 25-9-104.4(2), C.R.S., the Board added section 100.4.5, which exempts water treatment facilities that are not public water systems subject to the Colorado Primary Drinking Water Regulations.

Section 100.6. The Board combined the stormwater permitted facilities with other facilities discharging under listed general industrial permits, requiring these facilities to meet the conditions for classification as Class 2 industrial facilities. With changes to the stormwater permit discharge limits, there is the possibility a facility may install active treatment to meet permit discharge limits. This change ensures that if that were to occur, the facility would be required to operate under the direct supervision of a certified operator in responsible charge.

Section 100.7.5. The Board added a provision that exempts water distribution facilities that fall within the jurisdiction of the "Water Well Construction and Pump Installation Contractors Act," 37-91-101 C.R.S. This provision was moved into the regulation from the Board's "De Minimus Distribution Systems" policy (July 20, 2003).

Section 100.9. The Board added the minimum passing score to the requirements for certification. The Board changed the minimum passing score for certification by examination to 70 percent at the April 2004 meeting. This decision is being incorporated in the regulation for clarity and transparency of the Board's expectations.

To improve the alignment of like provisions, the Board moved the provisions regarding restrictions on Class T and Class S Water and Wastewater certifications from section 100.9.2 (d), (e), and (f) to section 100.18.5(c), (d), and (f), which defines the minimum certification levels necessary for certified operators in responsible charge for each facility classification. Persons holding Class T and Class S certificates may serve as a certified operator in responsible charge only when all of the criteria in the relevant sections is met.

The Board made changes to the wording to increase clarity and readability. In addition, redundant language in section 100.9.9(c) was removed regarding the special rules for satisfying the minimum experience requirement for entry level certification in order to simplify the section.

Sections 100.10 and 100.11. For consistency, the Board changed the word “type” to “category” in sections 100.10.7 and 100.11.6. In addition, the terms “small water system” and “small wastewater system” were corrected in section 100.10.7 to be consistent with changes to the certificate names made in 2012. Class T was added to the list.

Section 100.13.1(a)(iii) and section 100.13.6. To ensure the Board has the most accurate operator contact information, the Board added the requirements to provide current contact information when applying for a new certificate and to update the Board upon a change to the contact information within 30 days of such a change.

Sections 100.13(e) and 100.16. The Board added language to clarify its expectations and to incorporate language from its policies and procedures regarding the following topics: renewal process for operators absent due to military service, delegation of tasks or activities, and duties of certified operators in responsible charge. These include the following Board policies: Policy 13-2 (USERRA), “Delegation of Tasks to Uncertified Personnel,” approved September 24, 2002, and “Interpretation of Operator in Responsible Charge Duties,” approved June 26, 2001.

Section 100.13.5(a)(i). The Board broadened the list of certifying authorities for applicants seeking to obtain a certificate by reciprocity by adding the general term “another certifying entity”. This revision gives the Board discretion to consider certificates awarded by national or international water or wastewater professional organizations, such as the Association of Boards of Certification (of which the Board is a member), which offers professional certification for water and wastewater facility operators. The Board recognizes that this type of certification should be recognized and taken into account when evaluating an operator who applies for a certificate by reciprocity.

Section 100.15.6 and 100.20.1. The Board added the requirement for certified operators to conduct themselves in a professional manner when acting in the capacity of an operator, and included failure to do so to the list of offenses that may result in a Board disciplinary action. The Board made this addition to clarify its expectations with respect to a certified operator’s obligation to uphold the integrity of the CWP profession while acting in such capacity.

Section 100.18.2 and 100.18.3. The Board clarified for facility owners its expectation regarding who may make process control decisions and who must be available to make those decisions. This change is consistent with section 100.30 (Statement of Basis and Purpose November 2000), which states: “In order to meet EPA guidelines, the Board required that all process control and/or system integrity decisions about water quality or quantity that may affect the public health or the environment be made by either an operator in responsible charge or another certified operator. This operator must be certified at a level equal to or higher than that of the facility.”

100.51 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE: JUNE 30, 2015 RULEMAKING; EFFECTIVE AUGUST 30, 2015

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 June 30, 2015. 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.

Based on the input received from stakeholders, no changes to the provisions regarding experience requirements of section 100.9.4 are being made at this time.

Section 100.2(11). The board added the definition for owner. Not all suppliers of water, permittees and co-permittees are the owners of the physical facilities. Defining owner in regards to Regulation 100 clarifies who is responsible for ensuring the facility is under the direct supervision of a certified operator in responsible charge when it is operating as required by section 100.18.1.

Sections 100.10. For clarification, the board changed the title and provisions of section 100.10 to clearly reflect that this section refers to the first of the two-step process of certification, to apply to sit for a certification examination.

Section 100.13. To ensure consistency, provisions of Regulation 100 that refer to the issuing of the certificate, payment of program fees and the period each certificate is valid were moved to section 100.13 "Introduction." For transparency, the board added the requirements to comply with section 24-76.5-101 et seq., C.R.S., often referred to as the lawful presence legislation when applying for new or renewed certificates.

Section 100.13.1, 100.13.2 and 100.13.5. For clarification, the board changed the headings and provisions of these three sections to clearly reflect they refer to the second of the two-step process of certification, the requirement to submit application for new or renewed certificates or to obtain certification by reciprocity.

Section 100.15.3. In August 2014, the board adopted revisions to section 100.20.1(j) to clarify that the board may take disciplinary action for failure to conduct oneself in a professional manner. In this proceeding, the board also adopted section 100.15.3 to include in the list of certified operators' duties the requirement to act in a professional manner. The board made this addition to clarify its expectations with respect to a certified operator's obligation to uphold the integrity of the CWP profession while acting in such capacity.

Section 100.16.5. The board removed responsibility from the certified operator in responsible charge duties for the management, administration, compliance with regulatory and permit requirements, and other responsibilities that require decision-maker action and approval, such as providing operational, technical and financial resources necessary for proper operation and maintenance of the water or wastewater facility. These responsibilities are implicitly and explicitly identified in other applicable regulatory and permit requirements as belonging to the owner of the facility. The board wanted it clearly understood that the certified operator in responsible charge is responsible for the professional operation and maintenance of the facility as appropriate to their certification level and working with the resources provided by the owner.

Section 100.18.1(a) and (b). For consistency and clarity, the board combined these provisions so the definition for direct supervision immediately follows the requirement for direct supervision by a certified operator in responsible charge.

Section 100.18.1 (b). The board defined how an owner designates the certified operator in responsible charge.

Section 100.18.3(a) and (b). For consistency and clarity, the board combined these provisions so the definition for available immediately follows the requirement for a certified operator in responsible charge to be available to make decisions and initiate actions that are reserved to the certified operator in responsible charge.

Section 100.18.4. For clarity, the board defined how an owner reports changes to the certified operator in responsible charge to the division. The division requires that current update forms be used. In addition, the board removed reference to certified operators in responsible charge being employed or contracted by the owner from sections 100.18.4 (b) and (c). There are other relationships that may exist between the owner and certified operators in responsible charge.

Appendix B

Summary of changes to Regulation 100



COLORADO

Water Quality Control Division

Department of Public Health & Environment

Crosswalk of Changes

Regulation 100

12/9/2015

Jackie Whelan
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Citation*	Current	Proposed change	Comments
100.15	<u>CERTIFIED OPERATOR DUTIES</u>	Additions in RED	
100.15.3	Certified operators shall conduct themselves in a professional manner when acting in the capacity of a certified operator. "Professional manner" is defined as exhibiting dignified and respectful behavior towards the public, the regulated community and regulators.	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.	Define professional manner for clarification.
100.20	<u>Disciplinary Proceedings</u>		
100.20.1	The 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:	No change	
100.20.1(j)	failing to conduct oneself in a professional manner when acting in the capacity of a certified operator. "Professional manner" is defined as exhibiting dignified and respectful behavior towards, regulators, the regulated community and the public.	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.	Clarification of behaviors warranting a disciplinary action.



COLORADO

Water Quality Control Division

Department of Public Health & Environment

Crosswalk of Changes

Regulation 100

6/30/2015

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Citation*	Current	Proposed change	Comments
100.2	<u>DEFINITIONS</u>	Additions in RED	
100.2(1)-(10)		No change	
		100.2(11) "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 who controls a wastewater collection system. For purposes of this definition, "person" means an individual, a partnership, a corporation, a municipality, the state, the United States, or any other legal entity, public or private.	The statute and regulation do not have a definition of owner as used in Reg. 100. Not all suppliers of water, permittees, those required to apply for a discharge permit, or entities that control a wastewater collection system actually own the physical facilities. In those situations, there has been some question about who is responsible for ensure direct supervision by an ORC. Stakeholders requested a definition of owner as used in Reg. 100 be added.
100.2(11)	"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.	(12)	Numbering adjusted to accommodate the new definition (11) Owner.
100.2(12)	"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.	(13)	Numbering adjusted to accommodate the new definition (11) Owner.
100.2(13)	"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.	(14)	Numbering adjusted to accommodate the new definition (11) Owner.

Citation*	Current	Proposed change	Comments
100.2(14)	"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.	(15)	Numbering adjusted to accommodate the new definition (11) Owner.
100.2(15)	"WASTEWATER TREATMENT FACILITY" means either a domestic wastewater treatment facility or an industrial wastewater treatment facility.	(16)	Numbering adjusted to accommodate the new definition (11) Owner.
100.2(16)	"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.	(17)	Numbering adjusted to accommodate the new definition (11) Owner.
100.2(17)	"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.	(18)	Numbering adjusted to accommodate the new definition (11) Owner.
100.2(18)	"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.	(19)	Numbering adjusted to accommodate the new definition (11) Owner.
100.10	<u>APPLICATION FOR CERTIFICATION</u>	APPLICATION TO SIT FOR CERTIFICATION EXAMINATION	Clarify the first step of the two step certification procedure is to apply to take a certification exam.
100.10.1	A person desiring to be certified to operate a water or wastewater facility shall file an application with the Board or its designee.	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 designee.	Clarify this step is to apply to sit for an examination not certification. An applicant is notified in writing that they passed the exam and meets all eligibility requirements and can then apply for the certificate.

Citation*	Current	Proposed change	Comments
100.10.2	The Board shall designate the number of examination cycles during each calendar year.	No change	
100.10.3	For each examination cycle, the Board or its designee shall specify an application deadline.	No change	
100.10.4	All applications for certification examinations shall be made on forms provided by the Board or its designee.	No change	
100.10.5	Completed application materials and fees must be received by the Board or its designee on or before the application deadline for each examination cycle.	No change	
100.10.6	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).	No change	
100.10.7	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.	No change	
100.10.8	The Board or its designee 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.	No change	

Citation*	Current	Proposed change	Comments
100.10.9	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.	No change	
100.10.9(a)	Any such request for re-review must be received by the Board or its designee within two weeks of the date of the disapproval notification letter.	No change	
100.10.9(b)	All additional factual information supporting the application must be received with the re-review request.	No change	
100.10.10	If an application is still disapproved after re-review, the applicant may appeal this determination to the Board.	No change	
100.10.10(a)	Any such appeal must be received in the Board's office within two weeks of the date of the second disapproval notification letter.	No change	
100.10.10(b)	No new factual information will be accepted during the Board appeal process, except for good cause shown.	No change	
100.13	<u>CERTIFICATES</u>	No change	

Citation*	Current	Proposed change	Comments
100.13		<p>The Board or its designee shall award to the applicant a certificate designating the appropriate certification level upon satisfactory fulfillment of the requirements of section 100.13.1, 100.13.2 or 100.13.5, as appropriate, and payment of all applicable program fees listed in section 100.19.2.</p> <p>New operator certificates shall be valid for three (3) years from the date of the certification eligibility notification letter. Renewal 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.</p>	
100.13.1	New Certificates	Application for New Certificates	Clarify the second step in the two step procedure for certification is to submit the application for the certificate.
100.13.1(a)	Upon written notification that they have passed the certification examination and are eligible for certification, successful examinees must pay the required administration and applicable late fees as listed in section 100.19.2 and complete the following, where applicable:	<p>Strike "Upon written notification that they have passed the certification examination and are eligible for certification, successful examinees," the word "and" before pay and the work complete.</p> <p>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, pay the required administration and applicable late fees as listed in section 100.19.2, and shall submit the following, where applicable:</p>	Clearly explain the procedure to apply for certification.

Citation*	Current	Proposed change	Comments
100.13.1(a)(i)	demonstrate fulfillment of the experience requirements for Class D, Class 1, Class S and Class T certification pursuant to section 100.9;	Strike "demonstrate fulfillment" verification of the experience requirements for Class D, Class 1, Class S and Class T certification pursuant to section 100.9.9;	To demonstrate experience, the applicant must submit verification of completing the requirement. This change provides clarification of the procedure. Correct citation
100.13.1(a)(ii)	submit a copy of a high school diploma pursuant to section 100.9.3(c); and	Strike "submit." "a copy of a high school diploma pursuant to section 100.9.3(c);	Grammatical correction Note: section 100.9.3(c) refers to secondary students taking the exam during their last semester before HS graduation.
100.13.1(a)(iii)	provide a current mailing address, telephone number and email address (if available).	Strike "provide." a current mailing address, telephone number and email address (if available); and	Grammatical correction
		100.13.1(a)(iv) verification of lawful presence in the United States in accordance with sections 24-76.5-101 et.seq, C.R.S.	This is required by statute and is added here for clarification and transparency of the process.
100.13.1(b)	Upon satisfactory fulfillment of the requirements of section 100.13.1, the Board or its designee shall award to the applicant a certificate designating the appropriate certification level.	Delete	Moved to section heading
100.13.1(c)	Newly awarded operator certificates shall be valid for three (3) years from the date of the certification eligibility notification letter unless revoked or suspended as provided in section 100.23 of these regulations.	Delete	Moved to section heading

Citation*	Current	Proposed change	Comments
100.13.1(d)	An applicant shall complete the certification process by paying the administration and applicable late fees as listed in section 100.19.2 within three (3) years from the date of the certification eligibility notification letter.	Renumber 100.13.1(b)	
100.13.2	Renewal of Certificates	Application for Renewal of Certificates	
100.13.2(a)	Certified operators must submit a written application for renewal to the Board or its designee prior to the expiration date of the certificate.	Certified operators must submit a written application for renewal to the Board or its 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.	
100.13.2(b)	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.	delete	
100.13.2(c)	Renewal applications must demonstrate that the certified operator satisfies the requirements of this regulation including meeting the renewal training unit requirements stated in section 100.14.	(b)	
		(d) 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.	This is required by statute and is added here for clarification and transparency of the procedure.
100.13.2(d)	The Board or its designee shall provide all application forms for renewal of certificates.	No change	Numbering correction
100.13.2(e)	Renewal Process for Certified Operators Absent Due to Military Service	No change	Numbering correction

Citation*	Current	Proposed change	Comments
100.13.2(a)(i)	<p>“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.</p>	No change	
100.13.2(a)(ii)	<p>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 designee shall have the discretion to extend this grace period to address extenuating circumstances on a case-by-case basis.</p>	No change	

Citation*	Current	Proposed change	Comments
100.13.2(a)(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 100.13.2(e).	No change	
100.13.2(a)(iv)	It is the certified operator's responsibility to alert the Board or its designee 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.	No change	
100.13.3	Expired Certificates	No change	
100.13.3(a)	A certificate becomes invalid on its expiration date.	No change	
100.13.3(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.	No change	
100.13.3(c)	No operator of a water or wastewater facility shall operate a facility in reliance on an expired certificate.	No change	

Citation*	Current	Proposed change	Comments
100.13.3(d)	An operator may apply for renewal for two years following expiration of the certificate. The Board or its designee will renew the certificate if the operator pays the renewal and applicable late fees, as listed in section 100.19.2(d), and satisfies all applicable renewal requirements.	No change	
100.13.3(e)	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.	No change	
100.13.4	100.13.4 Revocation of Non-Renewed Certificates	No change	
100.13.4(a)	Any certificate not renewed by the operator within two years of its expiration is automatically revoked.	No change	
100.13.4(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.	No change	
100.13.5	Certificates by Reciprocity	No change	
100.13.5(a)	Certificates may be issued by the Board or its designee, without examination, on a case-by-case basis, to persons in a comparable classification who have met the following requirements:	No change	

Citation*	Current	Proposed change	Comments
100.13.5(a)(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.	No change	
100.13.5(a)(ii)	Obtained qualifying experience in the state, territory or possession of the United States, or other country in which they hold a valid certificate.	No change	
		(b) Operators must submit a written application for certification by reciprocity to the Board or its designee.	
100.13.5(b)	Upon written notification of approval by the Board for certification in Colorado, applicants shall pay the administration and applicable late fees as listed in section 100.19.2.	(c) Strike "Upon." 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.	For clarity and transparency of the current procedure, consistency with the wording of section 100.13.1, and to include the requirement to comply with statute.
100.13.5(c)	Certificates by reciprocity shall be considered "new" certificates subject to all requirements of sections 100.13.1 and 100.19.	(d)	
100.13.6	Certified operators shall update the Board or its designee with any changes to mailing address, telephone number, or email within 30 days of such change.	No change	

Citation*	Current	Proposed change	Comments
100.15	<u>CERTIFIED OPERATOR DUTIES</u>	No change	
100.15.1	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.	No change	
100.15.2	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 appropriate to their level of certification, including but not limited to the following:	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 100.16.6 as appropriate to their level of certification, including but not limited to the following:	clarification
100.15.2(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;	No change	
100.15.2(b)	controlling the processing of raw and/or treated and/or finished water/wastewater;	No change	
100.15.2(c)	preparing and/or controlling chemical addition for water or wastewater treatment;	No change	
100.15.2(d)	observing and taking necessary actions in response to variations in operating conditions;	No change	
100.15.2(e)	interpreting meter and/or gauge readings and adjusting facility processes based on such interpretations;	No change	

Citation*	Current	Proposed change	Comments
100.15.2(f)	operating valves and/or gates either manually or by remote control;	controlling the operation and maintenance of valves and/or gates;	
100.15.2(g)	starting and/or stopping pumps;	controlling the operation and maintenance of pumps;	
100.15.2(h)	maintaining logs and/or records; or	Strike "or"	
100.15.2(i)	collecting and/or analyzing process control samples.	Add collecting and/or analyzing process control samples; and	
		100.15.2(j) reporting instances of non-compliance or situations that could result in non-compliance to the certified operator in responsible charge.	
		100.15.3 A certified operator shall conduct oneself in a professional manner when acting in the capacity of a certified operator. "Professional manner" is defined as exhibiting dignified and respectful behavior towards regulators, the regulated community and the public.	In August 2014 the board amended section 100.20, "Disciplinary Proceedings" to add failing to act in a professional manner to the list causes for disciplinary action. Adding the requirement was inadvertently omitted at that time.
100.16	<u>CERTIFIED OPERATOR IN RESPONSIBLE CHARGE DUTIES</u>	No change	
100.16.1	Certified operator(s) 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.	Deleted the parentheses in "operator(s)"	In August 2014 the board amended the definition of certified operator in responsible charge, sec. 100.2(4) to allow a facility owner to designate more than one ORC.

Citation*	Current	Proposed change	Comments
100.16.2	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.	No change	
100.16.3	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.	No change	
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.	Strike the parentheses in “operator(s)”	
100.16.5	Certified operator(s) in responsible charge shall protect the public health and the environment in the conduct of their duties. These duties shall include the following:	Strike parentheses in “operator(s)” and the word “shall” in the last line. 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:	Clarify that the ORC is responsible for the operation and maintenance of a facility and for understanding the laws, regulations and permit requirements, but the legal responsibility for compliance with those laws, regulations and permit requirements remains with the owner.
100.16.5(a)	the management or administration of the operation of the water or wastewater facility;	Delete	Management and administration are responsibilities of the owner

Citation*	Current	Proposed change	Comments
100.16.5(b)	the accountability for the proper operation and maintenance of the water or wastewater facility for compliance with applicable regulations and/or permit requirements, including monitoring and reporting requirements;	Delete	Compliance is the responsibility of the owner under applicable laws, regulations and permits.
100.16.5(c)	the control of, supervision over, or active participation in the daily planning, operation or maintenance of a water or wastewater facility;	Strike “the,” “of,” “over,” and “daily.” Change “or” to “and” after operation. (a) controlling, supervising, or actively participating in the planning, operation and maintenance of a water or wastewater facility;	Correct verb tenses and numbering.
100.16.5(d)	authority to make day-to-day process control and system integrity decisions on the operation and maintenance of the water or wastewater facility;	Strike “authority to” and “day-to-day” (b) making control and system integrity decisions on the operation and maintenance of the water or wastewater facility;	Correct verb tenses and numbering.
100.16.5(e)	the availability to make decisions and initiate actions regarding the operation of the water or wastewater facility in a timely manner;	Strike “the availability to.” (c) making decisions and initiating actions regarding the operation of the water or wastewater facility in a timely manner;	Correct verb tenses and numbering.
100.16.5(f)	ensuring proper inspection and testing of new, modified, or repaired facilities prior to placing or returning such facilities into service;	Strike “ensuring proper” and “of.” (d) inspecting and testing new, modified, or repaired facilities prior to placing or returning such facilities into service;	Removing ambiguous terms, e.g. proper. Correct verb tenses and numbering.

Citation*	Current	Proposed change	Comments
100.16.5(g)	developing and implementing preventative maintenance programs and performing routine maintenance functions for facilities;	Strike “and implementing” and “performing the routine maintenance functions for facilities.” (e) developing preventative maintenance programs;	Implementing requires resources that may not be under the control of the ORC. The ORC may not be performing the maintenance activities, but is accountable under section 100.16.5. Correct verb tenses and numbering.
		100.16.5(f) developing and maintaining the written operating plan as described in section 100.16.6;	Clarify it is the ORCs responsibility to develop and maintain a facility’s operating plan for the delegation of tasks and activities.
100.16.5(h)	overseeing compliance with laws and regulations and reporting as appropriate to facility owners and the Department; and	Delete “overseeing compliance with laws and regulations and” Replace with: (g) reporting instances of non-compliance or situations that could result in non-compliance as appropriate to facility owners and the Department; and	Compliance is the responsibility of the owner. ORCs are expected to report non compliance or situations that could result in non-compliance to either the owner, the department, or both. Correct verb tenses and numbering.
100.16.5(i)	the performance of other functions of direct responsibility, including those enumerated in section 100.15.	Strike “the performance of.” (h) performing other functions of direct responsibility, including those enumerated in section 100.15.	Correct verb tenses and numbering.
100.16.6	Certified operator(s) in responsible charge of a water or wastewater facility may delegate tasks or activities to other facility operators when delineated by a written operating plan.	Strike the parentheses in “operator(s).”	
100.16.6(a)	Such tasks may be performed by the facility operators even if the certified operator in responsible charge is not on-site.	No change	

Citation*	Current	Proposed change	Comments
100.16.6(b)	The operating plan must be precise in defining the limits of such tasks or activities.	No change	
100.16.6(b)(i)	The operating plan must be reviewed and updated, as needed, at least once each calendar year by a certified operator in responsible charge.	No change	
100.16.6(b)(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.	No change	
100.16.6(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.	No change	
100.16.6(d)	Certified operator(s) in responsible charge remain accountable for the consequences of the performance of such tasks by other facility operators under their charge.	Strike the parentheses in "operator(s)."	
100.18	<u>RESPONSIBILITIES OF WATER AND WASTEWATER FACILITY OWNERS</u>	No change	
100.18.1	Supervision by a Certified Operator in Responsible Charge	No change	

Citation*	Current	Proposed change	Comments
100.18.1(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.	<p>Add the definition of direct supervision. Strike "For purposes of this regulation;" and strike parentheses in "operator(s)."</p> <p>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.</p>	Clarification and grammatical correction.
100.18.1(b)	For purposes of this regulation, "direct supervision" means that the certified operator(s) 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.	Strike 100.18.1(b). Incorporated into 100.18.1(a)	Clarification.
		(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.	Clarification and transparency of the procedure for designating ORCs.
100.18.1(c)	Owners shall ensure that their agreement(s) with the certified operator(s) in responsible charge are sufficiently detailed and formal to reflect all the duties as outlined in section 100.16.	Strike parentheses in "agreement(s)" and "operator(s)."	Grammatical correction.

Citation*	Current	Proposed change	Comments
100.18.1(d)	Contracts for limited services do not fulfill the owner's obligation, under section 100.18.1(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.	No change	
100.18.2	Decisions Reserved to Certified Operator in Responsible Charge	No change	
	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.	"...in accordance with the facility's written operating plan as described in section 100.16.6.	Clarification
100.18.3	100.18.3 Availability of Certified Operator in Responsible Charge	No change	

Citation*	Current	Proposed change	Comments
100.18.3(a)	(a) Each owner of a water or wastewater facility shall ensure that a certified operator in responsible charge, or another operator certified at a level equal to or above the classification of the facility, is available whenever the facility is in operation.	Strike "(a)" and reduce indentation. Incorporate the definition of availability, 100.18.3(b) into this section. 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 100.16.6 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.	Clarification
100.18.3(b)	(b) For purposes of this regulation, "available" means either on-site or able to be contacted as needed to make decisions and to initiate appropriate actions in a timely manner.	Strike 100.18.3(b). Incorporated into section 100.18.3	Clarification
100.18.4	100.18.4 Reporting Requirement	No change	
	Each owner of a water or wastewater facility shall submit in writing to the Division, 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:	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:	Clarify the expectation to use the appropriate division form for notification of any changes.
100.18.4(a)	name, mailing address, phone number, and email address (if available) of the facility legal representative providing the information;	No change	

Citation*	Current	Proposed change	Comments
100.18.4(b)	full legal name and operator identification number of the certified operator(s) in responsible charge employed by the owner;	Strike "employed by the owner." full legal name and operator identification number of the certified operator(s) in responsible charge;	
100.18.4(c)	identification of the facility or facilities for which each certified operator in responsible charge employed or contracted by the owner has responsibility; or	Strike "employed or contracted by the owner." identification of the facility or facilities for which each certified operator in responsible charge has responsibility; or	
100.18.4(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.	the Public Water System Identification (PWSID) number, the Colorado Discharge Permit System (CDPS) permit number, or general permit certification number for all facilities listed.	Capitalize "System" as part of the document title.
100.18.5	Certified Operator in Responsible Charge Certification Requirements	No change	
100.18.5(a)	Each water and wastewater facility shall have at least one certified operator in responsible charge certified as shown in the following table:	No change	
100.18.5(b)	Table – Criteria for Certified Operator in Responsible Charge	No change	
100.18.5(c)	Class T certificate is only valid for operating facilities that meet all of the following criteria:	No change	
100.18.5(c)(i)	are classified as transient non-community public water systems;	No change	

Citation*	Current	Proposed change	Comments
100.18.5(c)(ii)	that draw water from ground water sources not under the direct influence of surface water;	No change	
100.18.5(c)(iii)	serve fewer than 100 individuals per day;	No change	
100.18.5(c)(iv)	utilize treatment consisting only of non-gaseous chlorine disinfection; and	No change	
100.18.5(c)(v)	would be classified as a Class “D” water treatment facility and as a Class “1” water distribution system under the provisions of this regulation.	No change	
100.18.5(d)	Class S Water certificate is only valid for operating facilities that meet all of the following criteria:	No change	
100.18.5(d)(i)	serve no more than 3,300 persons; and	No change	
100.18.5(d)(ii)	would be classified as a Class “D” water treatment facility and as a Class “1” water distribution system under the provisions of this regulation.	No change	
100.18.5(e)	Class S Wastewater certificate is only valid for operating facilities that meet all of the following criteria:	No change	
100.18.5(e)(i)	serve no more than 3,300 persons; and	No change	
100.18.5(e)(ii)	would be classified as a Class “D” wastewater treatment facility and as a Class “1” wastewater collection system under the provisions of this regulation.	No change	

Citation*	Current	Proposed change	Comments
100.18.6	The Division shall investigate any instances of possible violations of the requirements of section 100.18 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.	No change	

Appendix C

Attorney General's Certification of Enforceability

1. effective August 30, 2015
2. effective January 30, 2016

CYNTHIA H. COFFMAN
Attorney General
DAVID C. BLAKE
Chief Deputy Attorney General
MELANIE J. SNYDER
Chief of Staff
FREDERICK R. YARGER
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**STATE OF COLORADO
DEPARTMENT OF LAW**

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Natural Resources and
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June 27, 2016

Mr. Shaun McGrath
Regional Administrator, Region 8
United States Environmental Protection Agency
1595 Wynkoop Street
Denver, CO 80202-1129

RE: Attorney General Certification Regarding the Enforceability of Colorado's
Operator Certification Program

Dear Mr. McGrath:

This letter is provided in accordance with the requirements of the U.S. Environmental Protection Agency's Operator Certification Guidelines, and specifically, "Baseline Standard No. 1." On June 30, 2015 and December 9, 2015, the Colorado Water and Wastewater Facility Operators Certification Board ("Board") adopted certain revisions to its "Water and Wastewater Facility Operators Certification Requirements," Regulation No. 100 (5 C.C.R. 1003-2). These revisions to Regulation No. 100 became effective on August 30, 2015 and January 30, 2016, respectively. I hereby certify pursuant to my authority as Senior Assistant Attorney General and as counsel for the Board that these revisions did not impact the State of Colorado's legal authority to fully implement and enforce the requirements of its operator certification program.

Sincerely,

FOR THE ATTORNEY GENERAL

A handwritten signature in blue ink that reads "Annette M. Quill".

ANNETTE M. QUILL
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