

State of Colorado



Colorado Department
of Public Health
and Environment

Annual Operator Certification Program Report **January 1, 2011 through December 31, 2011**

Submitted to the U.S. Environmental Protection Agency
By the Colorado Water Quality Control Division
Colorado Department of Public Health and Environment
And by the Water and Wastewater Facility Operator Certification Board

*Dedicated to protecting and improving the health
and environment for the people of Colorado.*

In 1999, the U.S. Environmental Protection Agency (EPA) issued operator certification program guidelines specifying minimum standards for certification and recertification of 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).

Colorado was required to modify their certification program to meet all the requirements of the “Final Guidelines for the Certification and Recertification of the Operators of Community and Non-Transient Non-Community Public Water Systems,” 64 FR 5916 (Guidelines). The State of Colorado’s Operator Certification Program was approved as consistent with the Guidelines on June 22, 2001. This is the annual report to EPA providing a status update of Colorado’s Operator Certification Program (Program) for the nine major program components of the Guidelines for calendar year 2011 and was approved by the WWFOCB.

In previous years the Division has reported on the entire program. In an attempt to make the report succinct, increase readability, and to control the transaction costs of publication, this year the report will cover the status and continued implementation of the nine major program components for only community and non-transient non-community water systems in compliance with the requirements of the Guidelines. The report length was reduced from 105 pages to 11 pages.

The Division estimates savings from reducing the scope and length of the report as follows:

- The average time to read the report reduced from an hour and 50 minutes to less than 8 minutes.
- Staff time for compiling the report content reduced by 52% by reporting only on the required community and non-transient non-community water systems.
- The printing costs were reduced from \$9.24 per copy to \$0.47 per copy by also eliminating color graphics. For the 30 copies distributed to the Board, contractors, Division, and the EPA the cost was reduced from \$277 to \$14 for a savings of \$263.
- The salary savings for typing and formatting the report was reduced from \$164 to \$17 for a savings of \$147.
- The total cost savings is \$410 plus a 52% reduction in staff time for content development.

The Nine Baseline Reporting Components

1. Authorization

The Water and Wastewater Facility Operators Certification Board (WWFOCB) 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 WWFOCB is authorized by 25-9-101 through 110, C.R.S., to promulgate *Water and Wastewater Facility Operators Certification Requirements Regulation 100, 5 CCR 1003-2*, (Regulation) with requirements to govern the classification of water and wastewater facilities, the process for certification of operators, the roles and responsibilities of facility owners and their operator in responsible charge, and to provide for disciplinary action for operator misconduct and enforcement authority for facilities that fail to comply with the Regulation. The Water Quality Control Division (the Division) is responsible for the oversight of public water systems to ensure compliance with the Safe Drinking Water Act, the Colorado Primary Drinking Water Regulations, Regulation 100, and other pertinent regulations.

On November 29, 2011, the WWFOCB approved changes to Section 100.9, Regulation 100 which changed the certification exams from multiple-entry exams to sequential exams. These changes do not result in backsliding of requirements under Baseline Standard Number II of the Guidelines. The Colorado Attorney General's Office certifies this regulatory change does not impact Colorado's existing authority to implement its operator certification program. The certification is included as Attachment 1.

2. Classification of Systems and Operators

Systems

The Program classifies treatment plants based primarily on special design features including treatment processes that may contribute to complexity, the source of supply, and the plant's design capacity. The distribution system is primarily 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 and Class D is the lowest 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 and Class 1 is the lowest level of classification.

Rates listed in Table 1 represent an estimate of compliance for systems with the requirement to have a treatment operator certified at or above the level of the classification of the system. These rates are based on a comparison of the ORC tracking data and the list of active public water systems in SDWIS.

Table 1- Facility Compliance Rates with Treatment Operator in Responsible Charge Requirement				
Water System Type	Total Systems		Compliance Rate	
	<i>Adjusted*</i>	<i>Original**</i>	<i>Adjusted*</i>	<i>Original**</i>
Community	877	936	851 (97.04%)	931 (99.47%)
Non-Transient Non-Community	174	184	156 (89.66%)	180 (97.83%)
Combined	1051	1120	1007 (95.81%)	1111 (99.19%)

* CDPHE's SDWIS

** CDPHE's ORC Access Database

Operators

The Regulation 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. During 2011, the Program experienced significant changes, including new supervision and reassignment to the Compliance Assurance Section within the Division. As a result, staff with specialized skills was made available to assist with process and technology improvements. The new supervisor initiated a comprehensive review of program processes and tools, including a thorough review of public water system/certified operator compliance data. Preliminary results show the database used for compliance determination has been incorrect for an unknown period of time. This separate database was not integrated with the Division's Safe Drinking Water Information System (SDWIS) and contained a static inventory that could not be updated as public water system inventory data changed. As a result, the inventory of public water systems could not be maintained. The Division is integrating Program data into SDWIS in state fiscal year 2013 and will begin using SDWIS to track compliance with the certified operator requirements and expects to be able to report compliance rates with confidence in the 2012 annual report.

Colorado has 5,650 active water and wastewater certified operators holding a total of 10, 144 certificates. Active drinking water certificate counts are listed by category in Table 2. Certification is divided into separate treatment or distribution. Additionally, Colorado grants a combined treatment D and distribution 1 operator certification specifically for systems serving a population of less than 3,300.

Table 2 – Active Operator Certifications*	
Type of Certification	Number of Active Certifications
Distribution 4	889
Distribution 3	154
Distribution 2	611
Distribution 1	1056
Water A	767
Water B	250

Table 2 – Active Operator Certifications*	
Type of Certification	Number of Active Certifications
Water C	596
Water D	765
Small Water System	562

* Class A is the highest level of classification and Class D is the lowest level of treatment classification. Class 4 is the highest level of classification and Class 1 is the lowest level of distribution classification.

Source: Operator Certification Program Office

3. Operator Qualifications

Grandparenting

Colorado has not offered a “grandparenting” option since January 30, 2002. This was only available to water distribution operators and was valid for two years. All operators were required to obtain a standard or a restricted certification within two years of the effective date of the change to the Regulation. A restricted certification allows the operator to work only at the system where “grandparenting” was granted. Restricted certifications, like standard certifications, must be renewed every three years. If an operator chooses to work for an additional system or changes systems, a standard certification must be obtained. To date, Colorado certifies eighteen (18) restricted distribution 1 operators, three (3) restricted distribution 2 operators, and seven (7) restricted distribution 4 operators.

Exam Pass Rates

Successful completion of exams is vital to maintain a steady workforce of certified operators. Low pass rates continue to be an area of concern. The Program is hopeful that examination pass rates increase in 2012 as a result of sequential testing. Table 3 reports examination success rates.

Table 3 – Examination Pass Rates by Certification Level*			
Exam Type	# Pass	# Fail	Passing Percentage
Water A	41	81	33.61%
Water B	44	59	42.72%
Water C	81	45	64.29%
Water D	133	82	61.86%
Distribution 4	45	73	38.14%
Distribution 3	44	71	38.26%
Distribution 2	74	90	45.12%
Distribution 1	149	98	60.32%
Small Water	97	19	83.62%

* Class A is the highest level of classification and Class D is the lowest level of treatment classification. Class 4 is the highest level of classification and Class 1 is the lowest level of distribution classification.

Source: Operator Certification Program Office

4. 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 owners for failure to operate systems under the supervision of a properly certified operator. There were four enforcement actions taken against systems for violating the ORC requirement in 2011.

Operator Disciplinary Action

The Board has authority under 25-9-104(6) to establish criteria for the discipline or reprimand of an operator. Section 100.23.3 grants the Division the authority to investigate instances of possible misconduct by certified operators. There were four disciplinary action complaints made to the Program during calendar year 2011. Of those, one was dismissed for lack of evidence of misconduct and the others remain under investigation.

5. Certification Renewal

Renewals and Professional Development

Individual operators are responsible for tracking and reporting their training units for certification renewal. Colorado uniquely contracts the operator certification and examination aspect of the Program to non-profit organizations comprised of subject matter experts (SME) who volunteer their time and expertise. These contractors subcontract daily operations to Total Events and Management Services, Inc. (TEAMS). TEAMS manages the Operator Certification Program Office (OCPO), who oversees the daily operation of operator certification. A portion of OCPO's duties are to review certificates and transcripts for fulfillment of the professional development requirements for renewal and apply them to an operator's file.

Training unit applications from trainers are also submitted to OCPO, a training unit approval committee of SME volunteers is electronically notified, and applications are reviewed by the members. The applicant electronically receives the decision of the submission. When the course is approved, it is automatically entered into the database of training courses.

All pertinent training from a university or college is automatically approved. Apart from universities and colleges, there were 541 courses offered in 2011. Many of these classes were held multiple times within the year. The price for each course varies from free to hundreds of dollars, but is not tracked so median prices for training are not available. There currently is not a clearinghouse that tracks the number of classes, number of attendees, or costs of each course. The Program currently does not rank courses by certification level. The Program will evaluate options for tracking courses, costs, and attendance during state fiscal year 2013.

Expense Reimbursement Grant

Reimbursement of training costs were extended through the Expense Reimbursement Grant (ERG). The ERG was in effect for the entirety of 2011. During the state fiscal year, 122 operators were reimbursed \$230 each for a total of \$27,950.

The Program continues to hold strict renewal standards for water operators. In 2011, there were 1,156 total renewals for community and non-transient non-community water systems. Currently there isn't a penalty for late renewals.

Capacity Development Partnership

The Program is expanding its partnership with the Division's Capacity Building Unit (CBU). The CBU was developed by the Colorado Drinking Water Program in partnership with a stakeholder group that includes drinking water systems, technical assistance partners, and Division staff. The CBU mission is to improve and maintain the technical, managerial, and financial capacity of public water systems to ensure a sufficient amount of continuously safe drinking water is provided to consumers. This partnership is critical to reach operators and systems on a "grassroots" level, to improve compliance, to enhance water quality, and to protect public health.

6. Resources Needed to Continue the Program

Major Division changes occurred in 2011, including staff. The program supervisor retired in August 2010 and a new supervisor was appointed in July 2011. A temporary employee was hired for six months to assist with administrative tasks (ending 12/31/2011). Additionally, a limited term employee was hired to assist with the proposal for Regulation 100 changes. This position was vacated in July 2011 and replaced with a regulatory analyst from December 12, 2011, to August 31, 2012, freeing up the program lead to work with stakeholders on regulation proposals. The Division continues to retain a supervisor, a full-time compliance specialist, and a part-time program assistant. The Program hopes to add a full-time temporary employee to assist with the migration of data into SDWIS.

The Program is planning major updates and developments to SDWIS. Problems with the current ORC tracking database have been identified and integration into the Division-wide data systems will commence in 2012. Additionally, multiple versions of the same information have been discovered in other Division data systems. These will be analyzed and consolidated throughout state fiscal year 2013 to prevent misinformation and miscommunication.

7. Stakeholder Involvement

Rulemaking

In May 2011, the Regulation revision process began. In June 2011, an e-mail was sent to approximately 100 operators for comment on possible changes. Approximately forty stakeholders replied. In July 2011, meetings were scheduled in Frisco, Frasier, Craig, and Parachute, Colorado. There were a total of eighteen certified operators attending the four meetings.

Beginning mid-July, changes to the regulation were drafted. On October 20, 2011, an invitation to participate in an online stakeholder review was sent to approximately 8000 persons representing certified operators, system owners, and other interested parties. The Program

received approximately forty comments which were reviewed and incorporated as appropriate. In addition, presentations regarding the proposed changes and plans for future stakeholder involvement were given to the Colorado Rural Water Association Conference (August 2011) and at the Rocky Mountain Water Environment Association Annual Conference (September 2011).

WWFOCB Meetings

The WWFOCB held six meetings in 2011; all meetings are open to the public and participation is encouraged. Topics covered are included in Table 4.

<i>Table 4 – WWFOCB Board Meeting Summary</i>	
Date	Summary
February 15, 2011	Renewal of examination provider contract approved
	Public comment received addressing issues related to the need for additional certified operators in upcoming years
April 26, 2011	Disciplinary action policy approved
	Two adjudicatory hearings for application approval were held and both were denied.
June 28, 2011	General discussion
August 30, 2011	General discussion
September 27, 2011	General discussion
November 29, 2011	Rulemaking hearing to adopt sequential testing
	WWFOCB briefed on the sunset review process to begin in 2012 by the Colorado Department of Regulatory Agencies

8. Program Review

Sunset Review

Water and Wastewater Treatment Facility Operators, Article 9 of Title 25, C.R.S., is undergoing a sunset review in 2012 by the Colorado Department of Regulatory Agencies. Any recommendations from the review for possible statutory changes will be made to the Colorado State Legislature during their 2013 legislative session.

The Program does not have a standardized process for conducting a periodic internal program review. The Program recognizes this is important to maintain transparency. The Division has begun a review of its processes, procedures, and data management to identify areas that are working well and those of concern. Partial guidance was created in late 2011 and will continue to be developed throughout state fiscal year 2013.

9. Implementation Schedule Update

The adoption of sequential testing on November 29, 2011, became effective on January 30, 2012. The Program will work to assure proper integration of sequential testing and expects to see

improved exam performance. With the 2011 integration of the Program into the Division's Compliance Assurance Section, improved data management and compliance tracking is forecasted. Further integration of the Program into Compliance Assurance is projected along with a more uniform Program implementation.

In conjunction with the Colorado Governor's Office, the Program will continue to reduce waste and increase efficiency. This includes streamlining policies and procedures utilizing State-approved LEAN methodology. Improvements will continue to be tracked both quantitatively and qualitatively.

Attachment 1

Colorado Attorney General's Certification of Legal Authority to Administer and operator Certification Program for Public Water Systems



RECEIVED

MAR 23 2012

WATER QUALITY CONTROL DIVISION

JOHN W. SUTHERS
Attorney General

CYNTHIA H. COFFMAN
Chief Deputy Attorney General

DANIEL D. DOMENICO
Solicitor General

STATE OF COLORADO
DEPARTMENT OF LAW

OFFICE OF THE ATTORNEY GENERAL

STATE SERVICES BUILDING
1525 Sherman Street - 7th Floor
Denver, Colorado 80203
Phone (303) 866-4500

March 20, 2012

Mr. James B. Martin
Regional Administrator, Region 8
U.S. Environmental Protection Agency
1595 Wynkoop Street, 8OC-EISC
Denver, CO 80202-1129

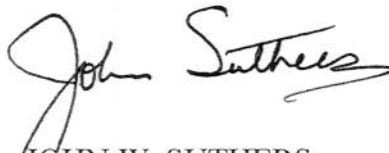
RE: Certification of Legal Authority to Administer an Operator Certification Program for
Public Water Systems

Dear Mr. Martin:

This certification is provided in accordance with Baseline Standard No. 1 of the U.S. Environmental Protection Agency's ("EPA") "Guidelines for the Certification and Recertification of Operators of Community and Nontransient Noncommunity Public Water Systems" (1999).

Since submitting its last annual report to EPA, Colorado's Water and Wastewater Facility Operators Certification Board adopted revisions to its Regulation 100 (5 C.C.R. 1003-2). The revisions provided for a change in the operator certification testing requirements to allow for a sequential progression approach (replacing a multiple entry approach). These revisions do not impact Colorado's existing authority to implement its operator certification program in accordance with EPA's minimum guidelines.

Sincerely,



JOHN W. SUTHERS
Attorney General

cc: Steven H. Gunderson, Director, Water Quality Control Division
Jackie Whelan, Operator Certification Program, Water Quality Control Division