

# STATE OF COLORADO

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Colorado Department  
of Public Health  
and Environment

## **OPERATOR CERTIFICATION PROGRAM ANNUAL REPORT: 2006-2007**

### **STATE OF COLORADO**

**SUBMITTED BY:  
COLORADO WATER AND WASTEWATER FACILITY  
OPERATORS CERTIFICATION BOARD  
AND  
WATER QUALITY CONTROL DIVISION**

**SUBMITTED TO:  
MR. BRUCE SUCHOMEL  
DRINKING WATER/OPERATOR CERTIFICATION  
REGION VIII  
ENVIRONMENTAL PROTECTION AGENCY**

**July 1, 2007**





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## **General Introduction**

This annual report is presented by the Colorado Department of Public Health and Environment, Water Quality Control Division, and the Water and Wastewater Facility Operators Certification Board, to the Environmental Protection Agency, Region VIII, Operator Certification Program Office, in fulfillment of the requirements of the Safe Drinking Water Act. This report covers the period May 1, 2006 through April 30, 2007.

Although the State of Colorado requires that all public water systems, including transient non-community systems, and most domestic and industrial wastewater systems be under the supervision of an appropriately certified operator, the material in this report will present data related to those systems regulated under the Safe Drinking Water Act, community and non-transient non-community water systems. For completeness, some of the information presented will include all systems regulated under Colorado statute. Such instances will be clearly noted in the text of the report.

The report details the State of Colorado's compliance with the nine major program components outlined in the "Final Guidelines for the Certification and Recertification of the Operators of Community and Non-Transient Non-Community Public Water Systems" as published in the Federal Register on February 5, 1999. The State of Colorado's Operator Certification Program was approved as consistent with these guidelines on June 22, 2001.

For information or to obtain additional copies of this report, contact:

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## **Section One Regulatory Changes**

The Water and Wastewater Facility Operators Certification Board (“the Board”) did not amend The Water and Wastewater Facility Operators Certification Requirements, 5 CCR 1003-2 (“Regulation 100”) during the April 2006-March 2007 period. Several amendments have been proposed and are scheduled for final action at a continued rulemaking hearing on May 29, 2007. EPA will be notified when a final decision is made. The full texts of the proposed amendments are presented in Attachment 1 of this document. The proposed amendments are summarized below.

### **Proposed Amendments.**

#### **1. Substitution of Experience and Training for a High School Diploma or GED – sections 100.9.2 and 100.9.3**

Historically, Colorado has accepted a demonstration of “equivalent skills” in lieu of a high school diploma or GED. The EPA guidelines for operator certification programs, “Guidelines for the Certification . . .” (Federal Register, Vol. 64, No. 24, February 5, 1999), state:

“States must require the following for an operator to become certified: . . .  
Must have a high school diploma or a general equivalency diploma (GED). States may allow experience and/or relevant training to be used to substitute for a high school diploma or GED. . . .”

Discussions with Jenny Bielanski, EPA Headquarters, indicate that EPA intends that this requirement be interpreted as written. A proposed change to Colorado’s requirement is, therefore, being made in order to require specific education and experience requirements for those applicants not holding either a high school diploma or a GED.

The proposed additional experience and education requirements, i.e., an additional six months of qualifying experience and completion of a course that would qualify as a substitute for entry-level experience requirement, seem to be a reasonable approach. At the entry level, this added experience requirement should demonstrate that an applicant has skills that have allowed him/her to maintain employment for a reasonable time in spite of the lack of a diploma. For applicants for higher-level certifications, the added experience requirement may seem a bit onerous. However, this requirement is designed to substitute for a substantial education requirement that the applicant does not meet.

The added education requirement should be of great benefit to applicants at the entry-level as they prepare for the certification examination. Caution must be exercised, however, to ensure that entry-level applicants without a high school diploma or GED provide either 7 months experience and 1 qualifying course or 6 months experience and 2 qualifying courses!

At higher levels of certification, the added education requirement might seem to be more a formalism than a useful requirement. The proposal, therefore, suggests that the Training Unit Approval Committees ensure that higher level courses, such as the Advanced Operators' School in March, the Advanced Distribution/Collection School in May, "A&B" sections at the RMSAWWA/RMWEA Leadville School in August, and A&B training at Colorado Rural Water be approved as substitutes for entry-level requirements.

## **2. Fee Schedule Revision – section 100.22**

In the six years since the use of ABC certification examinations and the reorganization of the Certification Program, fees have only changed once. In October 2004, the Board adopted an increase in the examination fee from \$25.00 to \$35.00. This fee increase was offset by a \$10.00 decrease in the administration fee charged for new certifications. With that one exception, fees for the Program have remained stable since early 2001.

Data from both CECTI and from the Certification Council indicate that operating expenses have increased significantly and show every indication of continuing to increase. Both groups have endeavored to maintain a reserve adequate to fund a full examination cycle. These reserves are now moving below the full cycle point. A request for a fee increase is, therefore, before the Board.

Rather than ask for a small increase that would only be adequate for a year or two, both CECTI and the Certification Council have recommended fee increases that are estimated to meet the Program's needs for approximately five years. Under this proposal, application fees would remain at the statutory level of \$15; examination fees would increase from \$35 to \$45; renewal/reciprocity fees would increase from \$60 to \$70. Hence the total cost of a new certification would increase from \$100 to \$115; the cost of a renewal/reciprocal certification would increase from \$75 to \$85. An additional fee of \$20 is requested to cover the costs associated with issuing a replacement certification. If approved, the fee increases would be effective January 1, 2008.

### 3. Change in the Number of Certification Levels in Water Distribution and Wastewater Collection – sections 100.7, 100.9, 100.14, and 100.21

There is a lack of internal consistency between Colorado’s water/wastewater treatment certification structure and the structure of water distribution and wastewater collection certifications. The chart below shows the current structure of each certification grouping:

<u>Treatment</u>			<u>Distribution/Collection</u>		
Level	Experience Required	Renewal	Level	Experience Required	Renewal
A	4 yr	3.0 TU	3	4 yr	3.0 TU
B	3 yr	2.4 TU	---	----	-----
C	2 yr	1.8 TU	2	2 yr	2.0 TU
D	1 mo	1.2 TU	1	1 mo	1.2 TU

Note that Colorado’s level “3” collection and distribution operators have already met the highest requirements that the state has for certification. They also have taken a prescriptive Association of Boards of Certification (“ABC”) examination, which is composed primarily of ABC’s level “IV” questions.

Along with ABC, most other states recognize four levels in both treatment and distribution/collection. This means that Colorado operators are at a disadvantage when moving to another state. They often have to argue their case in order to get Colorado’s level “3” certification recognized as equivalent to another state’s level “4” certification.

Colorado’s current level “3” certification is required for the supervision of all systems over 25, 000 people. This means that operators supervising medium-sized communities, such as Lafayette or Longmont must also master certification requirements appropriate to cities the size of Aurora or Denver.

The proposal before the Board would insert a new level “3” located to mirror level “B” on the treatment side. The proposed certification structure is illustrated below:

Level	<u>Treatment</u>		Level	<u>Distribution/Collection</u>	
	Experience Required	Renewal		Experience Required	Renewal
A	4 yr	3.0 TU	<u>4</u>	4 yr	3.0 TU
B	3 yr	2.4 TU	<b><u>3</u></b>	<b>3 yr</b>	<b><u>2.4 TU</u></b>
C	2 yr	1.8 TU	2	2 yr	<b><u>1.8 TU</u></b>
D	1 mo	1.2 TU	1	1 mo	1.2 TU

This proposal should help Colorado’s operators when they move out of state; it would make the testing process simpler because Colorado would be able to utilize ABC’s level “III” and level “IV” examinations as written; and it would facilitate the development of regional reciprocity agreements. The proposal would establish level “4” as a category specifically appropriate for the supervision of the largest of Colorado’s communities, i.e., those having a population over 100,000.

Operators currently holding level “3” certifications have already met the proposed requirements for the new level “4” certification and would simply be issued new level “4” cards. This will minimize the administrative issues that might be associated with a new certification level.

#### **4. Clarification and Amendment of the Requirements for the Substitution of Education for Experience – Sections 100.12.1**

The current regulation permits the substitution of up to 50% of the experience requirement by approved “technically oriented” programs and/or courses. The interpretation of “technically oriented” has been the source of almost all of the examination eligibility appeals heard by the Board. A clarification of the type of education that may substitute for actual operating experience seems in order.

The proposal before the Board would define two categories of approved education: (1) programs and courses that are specifically relevant to the water and wastewater profession, and (2) programs and courses that are technically oriented and require substantial quantitative skills, but that are not specifically relevant to the water and wastewater professions.

Under the proposed rule, programs and courses in group (1) could be substituted for up to 50% of the required experience for any certification, whereas programs and courses in group (2) could be substituted for only 25% of the required experience for any certification.

Please note that this proposal is still under discussion, and the final form of the adopted regulation may or may not reflect the above discussion.

## **Section Two**

### **Resources**

Under the Colorado statutes governing funding, the Operator Certification Program could not become self-funding as long as it remained a part of the Water Quality Control Division. In order to improve the quality of the program and to allow it to be self-funded, certain aspects of program administration have been privatized.

The Water and Wastewater Facility Operators Certification Board (“the Board”), appointed by the Governor of Colorado is the Program’s governing body. The Board consists of nine voting members, representing a variety of water and wastewater interests, and one ex-officio representative of the Water Quality Control Division. The current Board roster is appended as Attachment 2.

Contracts have been executed between the Board and Colorado Environmental Certification and Testing, Inc. (“CECTI”) and between the Board and the Colorado Water Distribution and Wastewater Collection Systems Certification Council (“the Certification Council”). These two groups are responsible for administering certification examinations, renewals, reciprocity, and certification-related record keeping functions on behalf of the Board.

The Water Quality Control Division acts as staff and policy advisor to the Board and is responsible for compliance assurance and for investigating and recommending disciplinary action to the Board.

#### **Personnel:**

The State of Colorado is directly involved in day-to-day program supervision, enforcement, compliance assurance, disciplinary action, and the provision of staff support and policy guidance to the Board. The Division of Administration of the Colorado Department of Public Health and Environment provides an administrator (Mr. Paul Frohardt) and half-time administrative assistant (Ms. Nancy Horan) to the Board. The Office of the Attorney General has assigned a staff attorney (Ms. Annette Quill) to assist the Board with legal issues.

The Water Quality Control Division (“WQCD” or “the Division”) staffs the Facility-Operator Program, to which one full-time Program Lead (Ms. Betsy Beaver) is assigned. The program is also supported by a 75% time permanent program assistant (Ms. Lori Billeisen). The program leader is responsible for compliance assurance and enforcement activities related to facilities; for initiating disciplinary actions related to operators; for providing policy guidance to the Board; and for coordinating operator certification with the other activities of the Division.

Other sections within the Water Quality Control Division take an active role in the efforts of the program. The Engineering Section routinely consults with the program on aspects of sanitary surveys and design approvals that are relevant to the certified operator requirement. The database resources of the Division are available to the program, and the enforcement work group regularly assists the program in gathering the data necessary for compliance-related actions.

CECTI and the Certification Council each provide a committee of volunteer members who oversee the administrative aspects of their contract with the Board. The governing board of CECTI is composed of nine members, three appointed by each of the following professional groups – the Rocky Mountain Section of the American Water Works Association, the Rocky Mountain Water Environment Association, and the Colorado Rural Water Association. The Certification Council is composed of 20 water distribution and wastewater collection system operators who have demonstrated expertise and experience in the field. The 2006-7 CECTI and Certification Council rosters are appended as Attachment 3.

Each of these groups provides committees of experienced operators, who serve as subject-matter experts. These committees make substantive decisions, which can be appealed to the Board, on such matters as the evaluation of examination applications, reciprocity requests, and training unit approvals.

Members of CECTI and the Certification Council also work with the Association of Boards of Certification (“ABC”) on the formulation and administration of validated examinations. (ABC is the national certification association, which provides validated certification examinations to 44 states, including Colorado.) Members of each group are active on a variety of ABC committees. Mr. Richard Bond of the Certification Council is an elected member of the Board of Directors of ABC and also serves as the chair of the ABC Water Distribution Validation and Examination Committee (“V&E Committee”). Mr. Gayle Lammers of CECTI and Mr. Bill Giannetti of the Certification Council serve on ABC’s Industrial Wastewater V&E Committee; Mr. Ray Olson, General Chairman of the Certification Council is a member of the Water Distribution V&E Committee; and Mr. Richard Platt of the Certification Council is a member of the Wastewater Collection V&E Committee. Mr. John McEncroe of the Board and of the CECTI water examination committee is actively involved in ABC’s project to standardize water treatment facility classifications; and Mr. Tom Settle of CECTI is a member an ABC committee examining the possibility of developing reciprocity agreements within the various EPA regions. Additionally, the Certification Council has donated their entire bank of questions on water distribution and wastewater collection to ABC for validation and use on ABC examinations.

CECTI and the Certification Council each report to the Board on a monthly basis and present substantive written analyses after each certification testing cycle. The 2006 Annual Report of CECTI and the Certification Council is appended as Attachment 4.

The day-to-day administration of the certification aspects of the program is handled by the Operator Certification Program Office (“OCPO”). OCPO is a private subcontractor to both CECTI and the Certification Council. OCPO is available to operators by telephone, fax, email, and office visit during normal business hours. The OCPO office recently moved to a location closer to the Division and Board offices. The new office space is larger and more convenient and was obtained at a cost less than OCPO’s former office space. OCPO may be reached at:

Operator Certification Program Office  
2170 South Parker Road, Suite 290  
Denver, Colorado 80231  
303-394-8994  
FAX: 303-394-3450

OCPO is the primary contact point for operators with questions or issues regarding certification. The OCPO staff has become increasingly well-trained and is capable of dealing with most certification

issues. Complex issues or issues related to compliance are referred to the WQCD Facility-Operator Program.

### **Database Development:**

Operator Certification Database. OCPO tracks each operator's certification status by means of an Access database that lists more than 10,000 individuals who have taken certification examinations. This database tracks each operator's contact information, current and past certifications, examination data, renewal data and disciplinary status. A portion of the administration fee charged each certified operator funds the maintenance of this database. Updated versions of this database are made available as needed to the Board and to the Division on a "read-only" basis.

To ensure that the information maintained for each operator is accurate, OCPO makes a general mailing to all operators each year in March. Operators are provided with an opportunity to update and correct database information. The 2007 mailing included information on the changes to renewal procedures, website and application deadline information, and changes to the operator tracking system (social security numbers have now been completely phased out and are no longer to be used as identifiers). The response to the annual letter is very high, and the information in the OCPO database is considered both current and reliable.

The annual OCPO letter also asks operators to indicate whether they act as operator in responsible charge for any water systems. This information is forwarded to the Division for verification and inclusion in the Division's System/Operator database.

System/Operator Database. Data collected by the Division for public water systems, as well as for permitted domestic and industrial wastewater systems, (system contact information, operator in responsible charge designations, and system classifications) are housed in a database that bridges the operator certification database and the Division's existing public water system database, SDWIS. The System/Operator database was developed by Division staff, can be easily updated, and allows the Division to track system compliance with operator certification requirements. Information in this database provides a baseline for judging progress toward full compliance with the basic requirement that each public water system and that each domestic and industrial wastewater system be under the supervision of an appropriately certified operator.

The database is updated daily with information provided by operators and systems. In addition to basic contact information, the database keeps information on the compliance status of each water system, milestone dates, and notes on on-going compliance efforts. This database currently lists 2,697 systems, of which 901 are community water systems; 178 are non-transient non-community water systems; 759 are transient non-community water systems; the remainder are domestic and industrial wastewater systems.

This database resides in the Division and may be accessed only by the Facility-Operator Program. Selected information from the System/Operator database is made available to other sections within the Division by means of a spreadsheet that contains non-sensitive information on the compliance status of systems. This spreadsheet is updated whenever the database is updated. An updated version of the spreadsheet is posted to the Division intranet each month, more often if necessary. Separate spreadsheets are maintained in order to track the status of Transient Non-Community water systems and for enforcement proceedings.

A recently developed tracking technique has made several significant improvements in the program's ability to follow up on the progress water systems are making toward meeting the certified operator requirement. Program staff have become more expert in manipulating the Access database, and newly developed queries enable the rapid utilization of a variety of data reports. Because of the ability to utilize complex queries, the Program can now provide a variety of specialized system-operator information to other sections within the Division. The Program is now better able to identify problem areas – either by geography or by system type.

#### **Other Resources – Water Quality Control Division:**

The Enforcement Group within the Division's Compliance Assurance and Data Management Section works with the Facility-Operator Program on enforcement matters. Enforcement orders issued to systems for monitoring, reporting or standards violations are routinely forwarded to the program. The program forwards copies of these documents to the operators in responsible charge of the systems. This is done (1) because the operator often does not receive these documents from the system ownership in a timely manner; and (2) items specifically under the control of the operator are highlighted and the operator is required to describe his/her actions to correct the noted deficiencies.

The Division's Engineering Section ("Engineering") provides technical advice on facility classification to the Facility-Operator Program. This section also alerts the program to potential and actual operational problems within systems and assists in the investigation and documentation of operator misconduct. Engineering assists in the identification of problems with respect to operator issues. These issues are discussed in open forum at general meetings of the Engineering Section. Engineering also provides valuable input and insight as policy recommendations for Board consideration are developed.

There is a close working relationship between the Facility-Operator Program and the Division's Capacity Development Program. These two groups work together, in cooperation with outside groups, to provide assistance to systems that have financial and technical difficulties. The Capacity Development Program has developed the work plan for Operator Training and Certification Expense Reimbursement Grant ("ERG"). The ERG work plan has been revised, and the Facility-Operator Program is assisting the Capacity Development group with grant administration.

#### **Expense Reimbursement Grant:**

Direct reimbursement for certification costs. The grant continues to provide reimbursement for the direct costs of certification – application, examination and administration fees – to all successful water treatment, water distribution, and small water system certification candidates who serve systems with a population less than 3,300 persons. The reimbursement is available to individual operators or to systems.

This phase of the ERG program was implemented in February 2003 and is on-going. All eligible water systems were notified of the availability of the program. Additionally, grant eligibility announcements are distributed at meetings, training sessions, and through the Colorado Rural Water Association. The reimbursement program is active and utilized by operators from small systems throughout the state.

Establishment of an operator training/resource library. The library is a cooperative project of the American Water Works Association (for materials) and the Colorado Rural Water Association (for

physical space and administration). The current collection numbers over 325 videos and books. Materials from the library are made available to eligible systems on a no cost basis. The library catalog is posted on the Colorado Rural Water website. Operators can access the collection in person, by telephone or e-mail for pickup, by mail, or by inter-library loans. For operator convenience, arrangements have been made so that materials may be picked up at and returned to local public libraries.

The library continues to be a valuable resource for operators throughout the state. Discussions are underway with the Colorado Rural Water Association in order to determine if additional funds are necessary.

Development of Internet-capable training modules and/or testing opportunities. The increasing accessibility of and use of computers and the Internet have made Internet training and testing highly desirable. ABC has developed on-line certification examinations. The examinations are now available to states. OCPO and the executive Boards of CECTI and the Certification Council have submitted a grant proposal to begin on-line testing in Colorado with a pilot program in the Fall of 2006. This proposal was funded in 2006. The project has already established remote sites for the administration of certification examinations at public libraries in three of the proposed seven communities. Informal feedback has been overwhelmingly positive. However, on-line certification examinations are quite expensive, and may not prove to be economically feasible. The results of the pilot program will be studied carefully before making on-line certification examinations generally available.

Expansion of the availability of training in rural areas. The effort to expand the availability of training to operators and water systems in rural Colorado is principally coordinated by the Colorado Rural Water Association. Colorado Rural Water recently submitted a proposal for the funding of a mobile training laboratory, which can bring hands-on experience with state-of-the-art technology to rural operators.

The laboratory will consist of a large trailer and tow vehicle outfitted with equipment commonly used in water treatment and distribution applications by small systems. The three-year proposal also includes preliminary funding for an instructor. After the first three-years, it is anticipated that Colorado Rural Water will support the effort using its own resources or with funding from other sources.

The Division submitted a newly amended work plan for the ERG grant in spring 2007. This revision emphasizes the expansion of the availability of training in rural areas. The work plan requests that EPA amend the current granting document in order to ensure the viability of the Mobile Training Unit concept. A separate, more detailed report on the ERG grant work plan and status has been filed separately by the Capacity Development Program.

### **Outreach:**

Water Quality Control Division. The Facility-Operator Program cooperates with the Rocky Mountain Section of AWWA to provide seminars that include information on operator practice, professionalism, ethics, and certification requirements. AWWA sponsors monthly training seminars for operators at locations across the state. An estimated 500 operators attend these seminars each year. During 2006-7, the Division's Facility-Operator staff is presenting a talk on ethics and professionalism, as well as updated certification-related information at each seminar. Later in 2007 (August), the presentation will focus on disciplinary and enforcement procedures.

The Program has presented both ethics and certification regulation seminars at a variety of Colorado Rural Water Association training sessions, at the Boulder and Leadville training schools, and to several water and wastewater utilities. Other Division personnel have presented material on specialized topics and maintained an informational booth at the Colorado Rural Water Association Annual Conferences in Colorado Springs and Grand Junction. These two conferences attract both operators and managers from small systems throughout the state.

Water and Wastewater Facility Operators Certification Board. The Board holds its February meeting each year in Colorado Springs at the Colorado Rural Water Association Conference. During this meeting, the Board schedules topics of interest to operators in addition to its regular agenda. An extended period of time is also made available for public input. In 2006, thanks to improved scheduling and notice, the Board meeting was well-attended by both operators and water system managers. The 2007 Board meeting was less well attended, in part because of scheduling difficulties. Later in the year, the Board will discuss whether to continue this outreach program in 2008.

The Board also provides a website that contains certification information, application forms, regulation and policy updates, minutes of Board meetings, training opportunities, and other information. The Board website address has been simplified to make it more accessible: [www.cdphe.state.co.us/op/ocb](http://www.cdphe.state.co.us/op/ocb).

OCPO. OCPO has 3 full-time staff members assigned to the Operator Certification Program. OCPO also maintains a dedicated telephone line for the program. Telephones are answered during normal business hours. The OCPO staff is present at each examination site to take care of administrative matters relative to operators' records and to facilitate examination procedures. OCPO also maintains a website with links to the Board website and with other information, such as current examination results. The website is [www.ocpoweb.com](http://www.ocpoweb.com). This website contains examination schedules and application materials, renewal and reciprocity applications, a searchable database of training opportunities for operators, current news items of interest to the profession, recent examination results, and links to the Board website and to other websites of interest. It is also the site for electronic submission of courses for training unit approval. OCPO continues with the development of an on-line application procedure for certification examinations.

## **Section Three**

### **Certification Examinations**

#### **Introduction:**

The initial certification process is administered for the Board by its two contractors. Water and wastewater treatment examinations are administered by CECTI. Water distribution and wastewater collection examinations are administered by the Certification Council. Prior to 2001, the Certification Council administered the voluntary certification program for water distribution and wastewater collection operators. These two contractors, through OCPO, also administer the certification renewal program, the reciprocity program and the certified operators database. The 2006 Annual Report of CECTI, the Certification Council and OCPO are appended to this report as Attachment 4.

#### **Examinations:**

Water and Wastewater Treatment: Examinations for water and wastewater treatment certification as well as Small Systems certifications are offered during two examination cycles each year. The Spring cycle offers examinations at a variety of locations between mid-January and the end of March. The Fall cycle offers examinations between mid-July and October.

The availability of treatment examinations has gradually been increased. There are now six sites available for the Fall examinations and six sites available for the Spring examinations. Sites at Fort Morgan, Grand Junction and Alamosa have been added to the traditional examination locations in order to increase geographic coverage. The Fort Morgan and Alamosa sites are rotated annually.

Water Distribution and Wastewater Collection: Certification examinations for water distribution and wastewater collection as well as for Small Systems are offered at several locations on a single date twice a year. Examinations are offered in May at Boulder, Montrose and Pueblo, and in November at Boulder and Montrose. Additionally, all levels of distribution and collection examinations are offered at the Leadville treatment examination site in August.

Examination Source. All examinations are provided by the Associated Boards of Certification (ABC) testing program. All examinations are prescriptive examinations and have a difficulty level which is set above that of the standard ABC examination. Validated industrial wastewater examinations are now available from ABC.

#### **Examination Data:**

##### **Treatment Examinations:**

##### **Fall Cycle 2006:**

Examinations were offered at Leadville, Alamosa, Durango, Pueblo, Grand Junction, and Boulder.

Data:        All Categories  
              694 applications received  
              679 applications approved  
              605 examinations taken  
              295 examinations passed

Water Treatment  
              326 examinations taken  
              172 examinations passed

Wastewater Treatment  
              279 examinations taken  
              123 examinations passed

Spring Cycle 2007\*:

Examinations were offered at Pueblo, Colorado Springs, Boulder (x2), Fort Morgan, and Rifle. \*Results from the final spring examination in Pueblo are not available at this time.

Data:        All Categories  
              743 applications received  
              730 applications approved  
              \*562 examinations taken  
              \*313 examinations passed

Water Treatment  
              \*305 examinations taken  
              \*180 examinations passed

Wastewater Treatment  
              \*257 examinations taken  
              \*133 examinations passed

Fall Cycle 2007:

Examinations will be offered at Leadville, Pueblo, Grand Junction, Alamosa, Durango and Boulder. Applications are currently being accepted for these examinations.

## Distribution and Collection Examinations:

### Spring Cycle 2006:

Examinations were held on May 13, 2006 at Boulder, Montrose and Pueblo.

Data: All Categories (including Small System)

631 applications received

598 examinations taken

354 examinations passed

Water Distribution

351 examinations taken

187 examinations passed

Wastewater Collection

218 examinations taken

141 examinations passed

Small System (water and wastewater)

29 examinations taken

26 examinations passed

### Fall Cycle 2006:

Examinations were held on November 18, 2006 at Boulder and Montrose.

Data: All Categories (including Small System)

669 applications received

546 examinations taken

320 examinations passed

Water Distribution

317 examinations taken

144 examinations passed

Wastewater Collection

207 examinations taken

157 examinations passed

Small System (water and wastewater)

22 examinations taken

19 examinations passed

### Spring Cycle 2007:

Examinations are scheduled on May 12, 2007 at Boulder, Montrose and Colorado Springs. The Certification Council is offering a one day seminar on advanced topics in distribution and collection prior to the Colorado Springs examination. This is a new training opportunity for higher level operators.

**Summary:**

Since the adoption of Regulation 100 in 2001, a total of 4,550 operators have qualified for new or upgraded certifications in water distribution (2,575) and wastewater collection (1,975); a total of 3,507 operators have qualified for new or upgraded water treatment (2,080) and wastewater treatment (1,427) certifications. The Small Water Systems certification, which combines water treatment and water distribution for operators of small systems, first became available under the new program. Since then, 437 operators have qualified for the Small Water System certification.

**Table 1: Number of Certification Examinations Passed Since 2001**  
**\*(final Spring results not yet available for treatment examinations)**

	<b>2001-2002</b>	<b>2002-2003</b>	<b>2003-2004</b>	<b>2004-2005</b>	<b>2005-2006</b>	<b>2006-2007</b>
<b>Water Treatment</b>	495	310	292	369	305	309*
<b>Water Distribution</b>	644	370	418	491	321	331
<b>Small Water System</b>	129	96	75	113	63	61*
<b>Wastewater Treatment</b>	201	262	186	286	255	237*
<b>Wastewater Collection</b>	507	243	336	380	211	298

**Table 2: Total Number of Active Certifications by Category**

Water “A”	697
Water “B”	239
Water “C”	592
Water “D”	814
Small Water System	391
Transient Non- Community	63
Distribution “3”	830
Distribution “2”	556
Distribution “1”	1,046



## **Section Four**

### **Certification Renewal and Training**

#### **Introduction:**

The Colorado Operator Certification Program requires that operators renew their certification every three years. In order to renew a certification, an operator must demonstrate the completion of approved training units. The number of training units to be completed depends upon the level of certification. Training units are approved, on behalf of the Board, by CECTI and the Certification Council. To date 3,404 courses have been approved for training credit. All approved courses are listed on the Board's website and on the OCPO website, [www.ocpoweb.com](http://www.ocpoweb.com). The listings include course dates, contact information and the number of training units in each discipline for which the course is approved. Opportunities for operator training are provided by private individuals, by private and state institutions, by professional organizations, and by individual municipalities and districts.

**Renewals:** During 2006, a total of 1,430 certifications were renewed.

**Training Opportunities.** The OCPO website, [www.ocpoweb.com](http://www.ocpoweb.com), gives operators a powerful search tool for training identification. Operators may search this website by course date, location, keyword, category, etc. Search results are displayed in summary form. The operator can click on courses that seem feasible and display detailed information on the course. This website has made the process of course identification much simpler and more flexible.

The website has also simplified and accelerated the approval process for training units. Course providers may now apply for approval by submitting all material on a secure website. The material is then reviewed and rated by the approval committee electronically. The approved course and the training units assigned to it are then transmitted to OCPO for posting. This innovation has reduced the time for course approval from 60-90 days to less than two weeks.

#### **Current Data:**

Table 3 below illustrates the on-going availability of continuing education classes approved for credit toward certification renewal.

**Table 3: Availability of Continuing Education Opportunities by Training Type and by Year**

	Offered on Specific Dates	Offered on Multiple Dates	Web-based or Correspondence
2007 to date	50	170	107
2006	122	193	121
2005	100	251	133
2004	162	306	227
2003	199	251	167
2002	283	213	45
2001	201	115 (incl. web-based and correspondence)	—

One issue that continues to be a problem for operators is that training providers, in spite of the efficiency of the approval process, do not submit their courses for approval prior to the courses being offered. This restricts the selection for the operators looking for training opportunities. The OCPO office is actively encouraging trainers to submit their material in a timely manner.

Many training opportunities provide credit in more than one field. For example, a course on regulatory requirements might give credit in all fields, while a course on turbidity meters might receive credit only for water treatment. Other courses, like computer programming, are of general use but may not provide training specific to operational activities. Such courses are approved for supplemental credit. An operator applying for renewal must have at least one-half of his/her training within the specific field of the certification being renewed; the other half of the training requirement may be met by any approved course.

## **Section Five**

### **Compliance Status of Public Water Systems Regulated Under the Safe Drinking Water Act**

#### **Classification of Facilities:**

Each public water system has a dual classification – one for water treatment and one for water distribution. Treatment classifications are based primarily upon the complexity of the treatment process(es) utilized by the system. The process-based treatment classification is then scaled upwards as the size of the system increases. Distribution classifications are based primarily on size. Distribution systems with additional complexity may be classified at a higher level on a case-by-case basis.

The Division's Engineering Section and Permits Section review classifications as each facility is inspected or as its permit is renewed. Final decisions and confirmation of classification changes are the responsibility of the Facility-Operator Program. Each facility classification is matched with its designated operator's certification level by means of the system/operator database (see Section 2: Resources).

#### **Compliance Status:**

**Water Treatment:** Under the provisions of the Safe Drinking Water Act, all community and non-transient non-community public water systems must be under the supervision of an appropriately certified operator. In addition to the federal requirement, Colorado requires that all transient non-community public water systems have a certified operator.

There are currently 901 community water systems, including consecutive systems, and 178 non-transient non-community water systems in the System/Operator database. Of these 1,079 systems, 999 systems (92.5%) are currently under the supervision of a water treatment operator certified at the appropriate level. An additional 27 systems (2.5%) are operating under a compliance schedule that requires them to be under the supervision of a certified operator by a specified date. The remaining 53 systems (5%) are not in compliance with the fundamental operator certification regulation.

The total number of systems under regulation is gradually increasing, as is the relative number of systems meeting the certified operator requirement. A pre-enforcement analysis is currently underway to identify community water systems, which are chronically out of compliance. The table below illustrates the trend in system compliance since the 2004-5 reporting period:

**Table 4: Community Water Systems:  
Comparative Compliance Data**

	# of systems	# compliant or with valid compliance schedule	# not in compliance	% compliant or with valid compliance schedule
2006-2007	901	853	48	95%
2005-2006	906	845	61	93%
2004-2005	895	804	91	91%

**Table 5: Non-Transient Non-Community Water Systems:  
Comparative Compliance Data**

	# of systems	# compliant or with valid compliance schedule	# not in compliance	% compliant or with valid compliance schedule
2006-2007	178	173	5	97%
2005-2006	165	161	4	97%
2004-2005	161	137	24	80%

Non-Transient Non-Community Systems. The 2004 annual report noted a significant concern about the number of schools and day-care centers (all non-transient non-community systems) that were not under the supervision of a certified operator. The Division has focused its compliance efforts in this regard. Of the 78 schools and day-care centers in the state that are also public water systems, there are now 74 in full compliance and 3 operating under valid compliance schedules. This represents an increase of 5 schools in full compliance since the 2005-6 reporting period. A potential area of concern is the rapid growth of “man-camps” associated with the booming natural gas industry in western Colorado. The potable water for many of these camps is provided by water delivery services (i.e., trucked-in water).

The Division is working to develop a representative inventory of these camps and of the water haulers who serve them.

Geographic Distribution of Compliant Water Systems. Charts showing the compliance status of water systems within each county in Colorado for the past three reporting periods are appended in Attachment 5. Compliant systems are considered to be those with fully certified operators on staff or under contract and those with a valid compliance schedule in place. Each type of public water system is shown with the number of compliant systems and the number of non-compliant systems for each county. For example, Adams County currently has 38 community water systems, 37 of which are in compliance, and 1 of which is out of compliance. This result is tabulated in the first two columns of the “Community Water System” chart. Similar data for the 2005-6 and 2004-5 periods are shown in columns 3,4 and 5,6 respectively. Statewide totals are shown at the end of each chart. These data include both water treatment and water distribution.

With a few exceptions, it will be noted that the degree of non-compliance is rather evenly distributed across the state. The Division believes that the overall non-compliance rate of 3-5% is a practical minimum; however, preliminary analyses indicate that there are a few systems chronically out of compliance. Therefore, there still remains room for improvement in the overall compliance rate. The Division’s goal is to reach a point where violations are of a temporary rather than persistent nature.

#### Transient Non-Community Systems

Transient Non-Community water system compliance data are shown in Table 6 and in the final chart in Attachment 5. Even though these systems are not regulated under the Federal guidelines, they are regulated under Colorado law. The Division has made a concerted effort since 2005 to reduce the large number of Transient Non-Community systems whose status was unknown. Since 2005, the number of such systems has dropped from approximately 250 to 53. In 2002, there were an estimated 600 Transient Non-Community systems categorized as “status unknown”.

**Table 6: Transient Non-Community Water Systems:  
Comparative Compliance Data**

	# of systems	# compliant or with valid compliance schedule	# not in compliance	% compliant or with valid compliance schedule		Additional # with status unknown
2006-2007	706	665	41	94%		53
2005-2006	612	556	56	91%		147
2004-2005	446	390	56	87%		~250

### **Compliance Changes:**

Unfortunately, the program did not establish a compliance baseline in the System/ Operator database when the new certification program was implemented in 2001. However, a measure of compliance improvement made during each year can be made.

The data show that there are 8 more Community water systems in compliance in 2006-7 than there were in 2005-6. This number is approximately 1% of the 901 Community water systems in Colorado. Compliance rates for the Non-Transient Non-Community systems increased by 12 systems, 7% of the 178 Non-Transient Non-Community water systems in the state. The compliance rate for Transient Non-Community water systems increased by 109 systems, 15% of the 706 Transient Non-Community water systems whose status is known (and 14% of the 759 Transient Non-Community systems in the Division's database).

Future. The Division is in the process of completing a detailed policy on the escalation of enforcement efforts for non-compliance. The pre-enforcement steps (inquiry, advisement/ compliance schedule) have been exercised for a number of chronically out-of-compliance water systems. The policy will be applied to these systems, and enforcement action will be taken where appropriate.

### **Summary:**

At the present time, Colorado estimates that 95% of Community and Non-Transient Non-Community water systems are either in full compliance with the operator certification requirement (92.5%) or are operating under an agreed upon schedule for attaining compliance (2.5%). Geographic compliance data, organized by county, continues to be collected and analyzed. This information will be useful in targeting compliance efforts, planning training sessions, and determining future examination sites.

## **Section 6**

### **Enforcement and Discipline**

#### **Introduction:**

Colorado places responsibility for disciplinary action against individual operators with the Water and Wastewater Facility Operators Certification Board. The Board may impose penalties to include reprimand, suspension of certification, or revocation of certification. The Division is tasked with investigating allegations of operator misconduct and making recommendations for action to the Board.

The authority to initiate enforcement action against public water systems operating without a properly certified operator falls within the enforcement authority of the Division.

#### **Disciplinary Actions:**

To date, the Board has dealt with seven disciplinary cases against individual operators.

No Action. In two cases a recommendation of no action was presented to the Board. One case lacked a factual foundation (2001); the other did not demonstrate an actionable level of operator misconduct (2001). Both cases were dismissed without Board action.

Letter of Reprimand. In this case, the operator reached a consent agreement with the Board to accept a Letter of Reprimand with conditions that the operator change certain record-keeping practices and obtain additional training (2002).

Suspension. In this case, the operator agreed, in lieu of a suspension, to a two-year period of supervised practice, a significant training requirement and a requirement to upgrade certification levels (2004).

Revocation. Three cases involving revocation of certification were brought before the Board. In two of these cases, the operators' certifications were revoked (2001, 2003). In the remaining case, the operator reached a consent agreement with the Board to forfeit his certification and not to reapply for certification for a period of five years (2002).

Current Action. A request for a letter of reprimand is currently before the Board with respect to an operator's failure to maintain his system in compliance with applicable regulatory requirements (May 2007).

Informal Action. The Division routinely sends certified letters of "inquiry" to operators whose water systems are subject to enforcement action; where significant deficiencies or violations are identified; or where negative reports have proved credible. These letters are quite effective in warning operators that the possibility of formal disciplinary action exists and will be utilized as a step prior to formal disciplinary action. During 2005-6, 41 such letters were sent.

**Enforcement:**

The Division issues compliance schedules to water systems whose staff is actively pursuing certification. Systems are required to make interim arrangements with a local certified operator for consultation and emergency services. Systems that fail to meet compliance schedules are evaluated on a case-by-case basis. For example, a compliance schedule might be extended if a system's operator fails the certification examination by a small margin. In other cases, the facts may indicate that the system is not likely to comply within a reasonable time frame. At that point, enforcement action with the operator certification issue as a stand-alone violation becomes appropriate.

As noted in the section on compliance (section 5), there are 48 systems currently without a certified operator and not operating under a compliance schedule. These systems are being contacted and their overall compliance records are being studied. Systems with demonstrated compliance problems in other areas are prioritized. Some of these systems are in the Systems of Concern Program ("SOC") within the WQCD Drinking Water Program and any certification-related enforcement will be included in SOC actions. Other systems remaining out of compliance will become subject to enforcement action during the summer of 2007.

**Final Comment:**

While the Division is pleased with the results of the compliance phase of the program, it recognizes the constantly changing nature of the compliance issue. The certified operator requirement necessarily involves the interaction of a system owner and a system operator. Human interactions are at best unpredictable. Some systems change operators every other year; some – every other month. The program is striving to make each system aware of the need to report these changes and to find new operators in a short time frame. The Division is also pleased with the results of the study of the geographic distribution of system compliance. These data confirm the Division's perception that much of the current non-compliance is likely the result of normal fluctuations in system staffing.

## **Section Seven**

### **“Grandparenting”**

#### **Program Status:**

Under the provisions of section 100.18.2 of Regulation 100, the Division issued Letters of Authorization to water systems whose operators were, for the first time, required to obtain certification. For operators of distribution systems, and of most collection systems, certification was a new requirement. To expedite the transition from a voluntary to a mandatory certification system, Letters of Authorization, a.k.a. “grandparenting” letters, were made available for distribution and/or collection systems requiring the supervision of a certified operator. Note: water and wastewater treatment operators were already required by state law to obtain certification. Therefore, Letters of Authorization were not available to operators supervising water treatment or wastewater treatment activities.

The Grandparenting program ended on January 30, 2004. A total of 308 restricted certifications were issued, approximately two-thirds of those were in water distribution. Monitoring of the status of operators holding restricted certifications is on-going in order to ensure that these operators continue to serve only those systems for which the restricted certification was issued and that they fulfill all in-service training requirements and renew their certifications in a timely manner.



## **Section Eight**

### **Stakeholder Involvement**

#### **Formal:**

A comprehensive stakeholder process was convened during the development of the new program in 2000. A comprehensive review of the program was undertaken as a part of the sunset review in 2004. A stakeholder review of the entire program is projected for the 2009-10 reporting period.

#### **Division:**

The Division has continued to work with stakeholders on the regulation of multiple-facility operators. The stakeholder group consists of operators who contract their services, systems that utilize contract operators and other interested or affected parties. A similar effort is currently underway with respect to the sections in Regulation 100 covering education as a partial substitute for experience.

#### **Board:**

The Water and Wastewater Facility Operators Board meets monthly. These meetings are open to interested parties who are encouraged to make comments or suggestions and to ask questions. Open discussions at Board meetings have occurred on topics like program administration, experience evaluation and the new fee schedule.

The Board encourages informal stakeholder processes when policy matters of broad concern arise. Several such groups have been convened to advise the Board on policy development. Three major policy documents have emerged from this process: treatment/distribution interface, training unit approval processes, and examination application and administration processes.

The Board holds its regular February meeting in Colorado Springs at the Colorado Rural Water Association's annual conference. Because these meetings are attended by a broad representation of water and wastewater system operators and managers, the Board continues to expect valuable input into the administration of the program. The Board is currently evaluating whether to continue this practice.

#### **CECTI/Certification Council/OCPO:**

The contractors' boards meet monthly (Certification Council) and bi-monthly (CECTI) on a set schedule. Operators and other interested parties are welcome to attend these meetings. These meetings offer operators the opportunity to comment on the administration of the program.

The OCPO office sends a letter to each certified operator annually. In addition to requesting that the operators update their contact information, the letters encourage operators to make comments on the administration of the program.



## **Section Nine**

### **Program Review**

#### **Contract Review and Renewal:**

The Board's current contracts with CECTI and the Certification Council expire on June 30, 2009. Prior to the expiration of the contracts, the Board will review the assignment of duties within the contracts to ensure that all necessary administrative aspects of the certification program are covered adequately. The Board will also re-examine the level of customer satisfaction with the program.

#### **Internal Program Review:**

Internal program review is an ongoing process. This process has resulted in a streamlining of the training unit approval process, a revision of the reciprocity process, improved customer service, and an expansion of the number and geographic diversity of examination opportunities. The Division is in the process of reviewing and documenting the procedures in place for enforcement, for recommending disciplinary actions, and for the assessment of civil penalties.

#### **Formal Program Review:**

Under Colorado law, regulatory programs undergo a periodic sunset review. The Operator Certification Program was reviewed by the Office of Policy and Research of the Colorado Department of Regulatory Agencies. The review was completed in September 2003. The new legislation authorizing the program includes a sunset date of June 2013. Details of the sunset review were included in the 2004 Annual Report.

A more detailed review of the functioning of the program is tentatively scheduled for the 2009-10 reporting period. This review will involve a combination of questionnaires, interviews, stakeholders meetings, and internal commentary. Following this review, the Board will receive a program summary recommending changes and improvements.



**STATE OF COLORADO**  
**OPERATOR CERTIFICATION PROGRAM**  
**ANNUAL REPORT: 2007**

**ATTACHMENTS**



**Attachment 1:**

**Proposed Amendments to 5 CCR 1003-2**

**Water and Wastewater Facility Operators Certification Requirements**

**Regulation 100**

**Scheduled for Final Action: May 29, 2007**



# STATE OF COLORADO

Bill Ritter, Jr., Governor  
James B. Martin, Executive Director

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Colorado Department  
of Public Health  
and Environment

## NOTICE OF PUBLIC RULEMAKING HEARING BEFORE THE WATER AND WASTEWATER FACILITY OPERATORS CERTIFICATION BOARD

### SUBJECT:

For consideration of proposed revisions to Regulation No. 100, "Water and Wastewater Facility Operators Certification Requirements" (5 CCR 1003-2) as follows:

1. Revisions to sections 100.7, 100.9, 100.14 and 100.21 to add an additional certification level for water distribution and wastewater collection systems and operators.
2. Revisions to subsections 100.9.2 and 100.9.3 to clarify the provisions regarding the substitution of experience and training for a high school diploma or GED.
3. Revisions to subsection 100.12.1 to clarify the Board's intent regarding technically oriented programs and courses used as an education substitute for experience. (**See note below.**)
4. Revisions to section 100.22 to revise the current examination and administration fees, and to establish a new program fee to cover the cost of replacing certification documentation.
5. Deletion of duplicative language, in section 100.13.8.

A copy of proposed revisions, along with a proposed Statement of Basis, Specific Statutory Authority and Purpose, is attached to this notice as Exhibit 1.

**Please note** that with respect to the proposed revisions to subsection 100.12.1 regarding "technically oriented" programs and courses, the Board welcomes and will consider in this rulemaking other proposals regarding the appropriate provisions concerning substitution of education for experience requirements.

### HEARING SCHEDULE:

DATE: Tuesday, April 24, 2007  
TIME: 9:30 a.m.  
PLACE: Sabin Room  
Department of Public Health and Environment  
4300 Cherry Creek Drive South  
Denver, Colorado

### WRITTEN AND ORAL COMMENTS:

**The Operators Certification Board encourages all interested persons to provide their opinions or recommendations regarding the matters to be addressed in this rulemaking hearing. Oral comments on the proposed rule will be**

**received at the hearing. Depending on the number of people wishing to speak, a time limit for oral comments may be established.**

**In order to enhance the Board members' ability to review and consider public comments on the proposal, the submission of written comments in advance of the hearing is strongly encouraged. Written comments are due in the Board Office by April 11, 2007. The Board requests that 20 copies of all written statements be submitted. Anyone for whom the expense of providing these copies presents an economic hardship should contact the Board Office to make alternative arrangements. This will provide an opportunity for comments to be distributed to and reviewed by Board members prior to the hearing.**

**SPECIFIC STATUTORY AUTHORITY:**

The provisions of C.R.S. 25-9-101 through 25-9-110 provide the specific statutory authority for consideration of the regulatory provisions proposed by this notice. Should the Operators Certification Board adopt the regulatory language as proposed in this notice or alternative provisions, it will also adopt, in compliance with section 24-4-103(4) C.R.S., an appropriate Statement of Basis, Specific Statutory Authority, and Purpose.

Dated this 14<sup>th</sup> day of February 2007 at Denver, Colorado.

WATER AND WASTEWATER FACILITY OPERATORS CERTIFICATION BOARD

A handwritten signature in cursive script, reading "Paul D. Frohardt".

---

Paul D. Frohardt, Administrator

## EXHIBIT 1

### PROPOSED RULEMAKING FOR APRIL 24, 2007 BEFORE THE WATER AND WASTEWATER FACILITY OPERATORS CERTIFICATION BOARD

#### 100.7 WATER DISTRIBUTION SYSTEM CLASSIFICATION

100.7.1 Water distribution systems shall be classified by the Division in accordance with the following ~~five~~ six classes: Transient Non-community Water System, Small Water System, Class 1, Class 2, Class 3, or Class ~~3~~ 4. Small Water Systems are described in section 100.19.1(a). Transient Non-community Water Systems are described in section 100.19.2. For the other classifications, Class ~~3~~ 4 is the highest level of classification and Class 1 is the lowest level of ~~C~~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 WATER DISTRIBUTION SYSTEM CLASSIFICATION TABLE

The Small Water System classification is addressed separately in section 100.19.1 and the Transient Non-community Water System classification is addressed separately in section 100.19.2. For all other distribution systems:

<u>CLASS</u>	<u>POPULATION SERVED</u>
Class 1	3,300 or Less
Class 2	3,301 - 25,000

Class 3	<del>Over 25,000</del> 25,001 – 100,000
<u>Class 4</u>	<u>Over 100,000</u>

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 Section 100.7 only applies to distribution systems that serve a public water system.

## **100.8 WASTEWATER COLLECTION SYSTEM CLASSIFICATION**

100.8.1 Wastewater collection systems shall be classified by the Division in accordance with the following ~~four~~ five classes: Small Wastewater System, Class 1, Class 2, Class 3, or Class 3 & 4. Small Wastewater Systems are described in section 100.19.1(b). For the other classifications, Class 3 & 4 is the highest level of classification and Class 1 is the lowest level of classification. Except that 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.

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

100.8.2 The classification of any wastewater collection 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.

## **100.9 QUALIFICATIONS AND CLASSIFICATIONS FOR CERTIFICATION OF OPERATORS**

100.9.1(a) Operators certified under the previous system of classification and certification, including distribution and collection system operators who passed the voluntary examination, 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 Applicants shall be examined 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. Applicants must have a high school diploma; or a general equivalency diploma (GED)-~~or equivalent skills.~~

100.9.3 Experience and/~~or~~ 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 have an additional six months of qualifying experience and shall demonstrate the completion of 1.0 training units in a course approved as a substitute for entry-level experience requirements. ~~if the Board or its designee finds, on a case-by-case basis, that the applicant demonstrates the reading, writing and comprehension skills necessary to protect the public health and otherwise meets the requirements of this regulation.~~

100.9.4 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 EXPERIENCE REQUIREMENTS FOR OPERATORS TABLE

<u>Classification of Water or Wastewater Facility Operator</u>	<u>Minimum Experience Required</u>
Class D	1 Month
Class C	2 Years
Class B	3 Years
Class A	4 Years
<u>Classification of Distribution or Collection System Operator</u>	<u>Minimum Experience Required</u>
Class 1	1 Month
Class 2	2 Years
Class 3	<u>3 Years</u>
<u>Class 4</u>	4 Years

\* \* \*

#### 100.12 EDUCATION AND CROSS EXPERIENCE SUBSTITUTED FOR EXPERIENCE REQUIREMENTS

100.12.1 Substitution of education for experience requirements:

\* \* \*

(b) Credit for satisfactorily completing structured programs of study, approved by the Board or its designee, in a degree or certificate granting educational institution or equivalent may be given for programs ~~that are technically oriented, including but not limited to the fields of chemistry, physics, engineering, mathematics, biology, water and wastewater treatment processes as specified below.~~ 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).

(i) The following programs, which the Board has determined are directly relevant to the operation of water and wastewater facilities, may be used as a substitute for up to fifty percent of the experience requirement: environmental engineering, civil engineering, water and wastewater treatment [list to be supplemented based on input in the rulemaking hearing].

(ii) Other technically oriented programs that require substantial quantitative skills, including but not limited to chemistry, physics, engineering, mathematics, biology, hydraulics, and geographical information systems

may be used as a substitute for up to twenty-five percent of the experience requirement.

- (c) In instances where an approved degree or certificate program has not been completed, credit shall be granted for the completion of individual technically oriented courses completed, as follows, including but not limited to the fields of chemistry, physics, engineering, mathematics, biology, water and wastewater treatment processes, in accordance with subsection 100.12.1(a).
- (i) Courses that the Board determines are directly relevant to the operation of water and wastewater facilities may be used as a substitute for up to fifty percent of the experience requirement. Directly relevant courses shall include, but not be limited to:
- (A) operation and maintenance of facility mechanical systems, electrical equipment or hydraulics;
- (B) physical treatment, chemical treatment, biological treatment;
- (C) physical testing, chemical testing, biological testing or disinfection; and
- (D) regulatory compliance.
- (ii) Other technically oriented courses that require substantial quantitative skills, including but not limited to chemistry, physics, engineering, mathematics, biology, hydraulics, and geographical information systems may be used as a substitute for up to twenty-five percent of the experience requirement.

\* \* \*

### **100.13 CERTIFICATES**

\* \* \*

- 100.13. 7 Reciprocity--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 passed an adequate written examination and who hold a valid certificate in another state, territory or possession of the United States or any country 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.
- 100.13.8 ~~Reciprocity--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 passed an adequate written examination and who hold a valid certificate in another state, territory or possession of the United States or any country 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.~~

\* \* \*

## 100.14 TRAINING UNIT REQUIREMENTS FOR RENEWAL OF CERTIFICATION

\* \* \*

- 100.14.2 Operators seeking renewal of their certificates shall meet the following training unit requirements:
- (a) Class A water treatment, domestic wastewater treatment, and industrial wastewater treatment facility operators - 3 training units.
  - (b) Class B water treatment, domestic wastewater treatment, and industrial wastewater treatment facility operators - 2.4 training units.
  - (c) Class C water treatment, domestic wastewater treatment, and industrial wastewater treatment facility operators – 1.8 training units.
  - (d) Class D water treatment, domestic wastewater treatment, and industrial wastewater treatment facility operators – 1.2 training units.
  - (e) Class 4 water distribution and wastewater collection system operators - 3 training units.
  - ~~(e)~~(f) Class 3 water distribution and wastewater collection system operators – ~~3~~ 2.4 training units.
  - ~~(f)~~(g) Class 2 water distribution and wastewater collection system operators - 2 training units.
  - ~~(g)~~(h) Class 1 water distribution and wastewater collection system operators - 1.2 training units.
  - ~~(h)~~(i) Small water system operators – 1.8 training units.
  - ~~(i)~~(j) Small wastewater system operators – 1.8 training units.
  - (k) Transient non-community water system operators – 1.2 training units.
- 100.14.3 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 in accordance with section 100.15.

\* \* \*

## 100.21 RESPONSIBILITIES OF WATER AND WASTEWATER FACILITY OWNERS

\* \* \*

- 100.21.5 Each water and wastewater facility shall have an operator in responsible charge certified as shown in the following table:

<u>Facility or System Classification</u>	<u>Classification of Operator(s) in Responsible Charge</u>
<u>Water Systems</u>	
Water Treatment	
A	A
B	A or B
C	A, B, or C
D	A, B, C, or D

Small Water System	Small Water System; D and 1; or any higher-level water treatment and water distribution certifications
Transient Non-Community	A, B, C, D, Small Water System, or Transient Non-Community
Water Distribution	
<u>4</u>	<u>4</u>
3	<u>4 or 3</u>
2	<u>4, 3 or 2</u>
1	<u>4, 3, 2, or 1</u>
<u>Domestic Wastewater Systems</u>	
Wastewater Treatment	
A	A
B	A or B
C	A, B, or C
D	A, B, C, or D
Small Wastewater System	Small Wastewater System; D and 1; or any higher-level wastewater treatment and wastewater collection certifications
Wastewater Collection	
<u>4</u>	<u>4</u>
3	<u>4 or 3</u>
2	<u>4, 3 or 2</u>
1	<u>4, 3, 2, or 1</u>
<u>Industrial Wastewater Systems</u>	
A	A
B	A or B
C	A, B, or C
D	A, B, C, or D

\*\*\*100.22 FEES

100.22.1 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.

100.22.2 Program fees shall consist of ~~examination fees and administration fees~~ the following:

- (a) Examination fees in the amount of ~~\$35.00~~ \$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) Administration fees will be charged upon issuance of all new and renewal certifications and will be based on the cost of administering the operator certification program. Administration fees shall be:
  - (i) ~~\$50.00~~ \$55.00 for each new certification by examination; and
  - (ii) ~~\$60.00~~ \$70.00 for each renewal certification and each new certification by reciprocity.
- (c) There shall be a \$20.00 fee to cover the cost of replacing certification documentation.
- ~~(c)~~(d) Training unit approval fees shall be \$50.00 for each course submitted for review, except that: ...

**PROPOSED****100.44 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE:  
APRIL 24, 2007 RULEMAKING**

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) and 100.12.1(c). The Board has revised the provisions of Regulation No. 100 regarding substitution of education for experience. For a number of years there has been a debate regarding what courses or programs fit within the “technically oriented” language of this subsection. In particular, there were differing opinions regarding whether courses or programs must be directly related to the operation of water and wastewater facilities to get credit. The Board has now revised this provision to establish a two-tier system for credit for education as a substitute for experience. Courses or programs that the Board determines are directly relevant to the operation of water or wastewater facilities will be allowed to substitute for up to fifty percent of the experience requirement. Programs that the Board considers to be “directly relevant” are listed in the regulation. Individual courses will be reviewed on a case-by-case basis to determine whether the “directly relevant” requirement is met, with the list of directly relevant programs used as a guide.

Other technically oriented programs and courses that require substantial quantitative skills will be allowed to substitute for up to twenty-five percent of the experience requirement. While the Board believes that some substitution credit should be given for such programs and courses because of the importance of quantitative skills to water and wastewater facility operation, the Board has concluded that such programs and courses should not receive the same amount of substitution credit as those directly relevant to such facility operation.

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.

##### 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.

#### STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE: FEBRUARY 14, 2006 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 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. These definitions are to 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.

### **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.

**Attachment 2:**

**Roster: Water and Wastewater Facility**

**Operators Certification Board**



## **Water and Wastewater Facility Operators Certification Board**

### **2007 Roster**

Bodnar, Glenn (non-voting)  
Colorado Department of Public Health and Environment

Coyne, Allen E.  
Town Manager, Julesburg, Colorado

Grotheer, Tim, Vice-Chair  
Plum Creek Wastewater Authority, Castle Rock

Grundemann, Paul, Chair  
Centennial Water and Sanitation District

Hillery, Jeannette, Secretary  
League of Women Voters, Boulder

Leslie, Scott  
Environmental Process Controls, Carbondale

McEncroe, John  
Centennial Water and Sanitation District

Tautges, Gene L.  
Pagosa Area Water and Sanitation District

Valentine, Ronald, Chair  
Climax Molybdenum Company, Climax

Wooten, Herman R.  
Colorado Rural Water Association

The Board may be contacted through its administrator, Paul Frohardt, at 303-692-3468 or at [paul.frohardt@state.co.us](mailto:paul.frohardt@state.co.us).



**Attachment 3:**

**Rosters: Colorado Environmental Certification and Testing, Inc.**

**and**

**The Colorado Water Distribution and Wastewater Collection Systems  
Certification Council**



## **Colorado Environmental Certification and Testing, Inc. 2007 Roster**

Biberstine, Jerry – Vice President  
Colorado Rural Water  
National Rural Water

Dye, Bob  
Rocky Mountain Section AWWA  
Littleton/Englewood Wastewater

Hastings, Bob  
Colorado Rural Water Association  
Prairie View Property Owners Association

Hayes, Rich - Treasurer  
Colorado Rural Water Association  
Executive Director

Heppler, Paul  
Rocky Mountain Water Environment Association  
City of Boulder

Kirkpatrick, Kevin – President  
Rocky Mountain Section AWWA  
City of Lafayette

Lammers, Gayle  
Rocky Mountain Water Environment Association  
Washington Group

Oligo, Bobby  
Rocky Mountain Section AWWA  
Aurora Water

Rutt, Ken  
Rocky Mountain Water Environment Association  
City and County of Broomfield

CECTI may be contacted through the Operator Certification Program Office at  
303-394-8994.



## **Colorado Water Distribution and Wastewater Collection Systems Certification Council**

### **2007 Roster of Officers**

Olson, Ray – General Chairman  
Distribution System Resources, Ltd.

Jamsay, James – Secretary & Education Chair  
North Washington Street Water and Sanitation District

Wiseman, James – Treasurer  
Denver Wastewater Management, Retired

Book, Terry – Water Chairman  
Pueblo Board of Water Works

Platt, Richard – Wastewater Chairman  
City of Aurora

The Certification Council may be contacted through the Operator Certification Program  
Office at 303-394-8994.



**Attachment 4:**

**2006 Annual Contractors' Report to the Water and Wastewater  
Facility Operators Certification Board**



**Attachment 5:**

**State of Colorado  
Water System Compliance Data by County**



County	Community Water Systems					
	2006-7		2005-6		2004-5	
	# in	# out	# in	# out	# in	# out
Adams	37	1	39	2	39	2
Alamosa	6	0	5	1	4	1
Arapahoe	27	2	27	3	27	1
Archuleta	5	3	5	2	2	2
Baca	6	0	6	0	6	1
Bent	4	0	4	0	3	0
Boulder	34	1	37	3	35	3
Chaffee	19	2	18	3	15	4
Cheyenne	3	3	3	3	3	3
Clear Creek	10	0	10	0	10	1
Conejos	7	2	4	5	4	5
Costilla	6	1	6	1	6	1
Crowley	8	0	8	0	7	0
Custer	2	0	1	1	1	0
Delta	17	1	19	1	18	2
Denver	5	1	8	1	7	2
Dolores	2	0	2	0	2	0
Douglas	23	2	22	2	21	3
Eagle	26	0	25	0	24	1
Elbert	13	0	12	0	10	0
El Paso	59	3	59	5	53	6
Fremont	8	1	9	0	11	0
Garfield	47	0	47	2	44	4
Gilpin	3	0	3	0	3	0
Grand	23	0	23	0	22	2
Gunnison	18	1	17	0	18	0
Hinsdale	1	0	1	0	1	0
Huerfano	9	0	9	0	8	1
Jackson	2	0	2	0	2	0
Jefferson	47	1	46	1	44	3
Kiowa	5	0	5	0	5	0
Kit Carson	5	1	5	1	5	1
La Plata	43	5	41	5	41	5
Lake	7	0	6	0	7	1
Larimer	26	2	28	0	26	0
Las Animas	7	0	7	0	5	2

<b>Community Water Systems (cont.)</b>						
<b>County</b>	<b>2006-7</b>		<b>2005-6</b>		<b>2004-5</b>	
	# in	# out	# in	# out	# in	# out
Lincoln	6	0	6	0	6	0
Logan	10	1	10	0	10	0
Mesa	17	0	15	2	12	2
Mineral	3	0	2	1	2	0
Moffat	2	0	2	0	2	0
Montezuma	9	0	8	0	8	1
Montrose	14	0	16	0	15	0
Morgan	8	0	10	0	9	1
Otero	23	2	23	2	18	7
Ouray	6	0	6	0	6	0
Park	8	0	8	0	8	0
Phillips	3	0	3	0	3	0
Pitkin	27	2	26	2	23	3
Prowers	9	1	9	1	7	3
Pueblo	12	1	11	2	11	2
Rio Blanco	3	0	3	0	3	0
Rio Grande	5	0	4	1	5	0
Routt	17	1	16	1	16	1
Saguache	5	1	5	1	5	1
San Juan	1	0	1	0	1	0
San Miguel	10	0	9	1	9	1
Sedgwick	3	0	3	0	3	0
Summit	20	2	20	3	22	2
Teller	24	0	22	1	24	2
Washington	2	0	2	0	2	0
Weld	34	3	34	3	33	7
Yuma	2	1	2	1	2	1
# systems	901		906		895	
# in/out	853	48	845	61	804	91
% in/out	95	5	93	7	90	10

<b>Non-Transient Non-Community Water Systems</b>						
<b>County</b>	<b>2006-7</b>		<b>2005-6</b>		<b>2004-5</b>	
	# in	# out	# in	# out	# in	# out
Adams	10	1	8	0	7	0
Alamosa	3	0	3	0	4	0
Arapahoe	3	0	3	0	1	1
Archuleta						
Baca						
Bent						
Boulder	8	2	8	1	5	5
Chaffee						
Cheyenne						
Clear Creek	2	0	3	0	3	0
Conejos	1	0	1	0	0	1
Costilla	1	0	0	1	0	1
Crowley						
Custer						
Delta	1	0	1	0	1	0
Denver	2	0	1	0	1	0
Dolores						
Douglas	12	0	12	0	10	2
Eagle						
Elbert	2	0	2	0	1	0
El Paso	23	0	22	0	12	8
Fremont	3	0	3	0	2	1
Garfield	4	0	4	0	2	1
Gilpin	2	0	2	0	2	0
Grand	2	0	3	0	3	0
Gunnison	1	0	1	0	1	0
Hinsdale	0	0	0	0	0	0
Huerfano	1	0	1	0	0	0
Jackson						
Jefferson	25	0	23	0	22	1
Kiowa						
Kit Carson						
La Plata	5	0	5	0	5	0
Lake						
Larimer	8	0	8	0	9	0
Las Animas						

<b>Non-Transient Non-Community Water Systems</b>						
<b>County</b>	<b>2006-7</b>		<b>2005-6</b>		<b>2004-5</b>	
	# in	# out	# in	# out	# in	# out
Lincoln						
Logan	3	0	3	0	3	0
Mesa	2	0	2	0	2	0
Mineral						
Moffat	4	0	4	0	4	0
Montezuma						
Montrose	1	0	1	0	1	0
Morgan						
Otero						
Ouray						
Park	6	0	5	0	4	1
Phillips						
Pitkin	3	0	2	0	4	0
Prowers						
Pueblo	4	0	4	0	4	0
Rio Blanco	5	1	0	1	0	1
Rio Grande	3	0	2	0	2	0
Routt	5	0	4	0	4	0
Saguache	1	0	1	0	1	0
San Juan	1	0	1	0	1	0
San Miguel						
Sedgwick						
Summit	1	1	2	1	1	1
Teller	1	0	2	0	1	0
Washington	3	0	3	0	3	0
Weld	7	0	7	0	7	0
Yuma	4	0	4	0	4	0
# systems	178		165		161	
# in/out	173	5	161	4	137	24
% in/out	97	3	97	3	80	20

<b>Transient Non-Community Water Systems</b>							
<b>County</b>	<b>2006-7</b>			<b>2005-6</b>		<b>2004-5</b>	
	# in	# out	# unknown	# in	# out	# in	#out
Adams	15	1	1	14	2	10	2
Alamosa	8	1		6	3	1	2
Arapahoe	4	0		4	0	2	0
Archuleta	7	0		4	0	2	0
Baca							
Bent							
Boulder	34	2		25	3	16	3
Chaffee	28	1		28	0	17	2
Cheyenne							
Clear Creek	14	0		13	1	13	1
Conejos	9	0	1	4	1	3	0
Costilla	2	0		1	0		
Crowley							
Custer	11	1		12	0	6	1
Delta	6	0	1	2	0	2	0
Denver	2	0		1	0	1	0
Dolores							
Douglas	21	0	1	11	0	11	0
Eagle	13	0	4	12	0	7	0
Elbert	8		1	7	2	5	2
El Paso	31	2	2	25	1	15	6
Fremont	18	1	1	13	1	5	1
Garfield	21	2		17	1	6	0
Gilpin	11	1		8	3	8	2
Grand	37	0		29	3	14	0
Gunnison	28	1	4	24	1	19	0
Hinsdale	10	1	2	6	0	5	0
Huerfano	2	0		2	0	1	0
Jackson	5	0		4	1	1	0
Jefferson	40	2		35	6	29	4
Kiowa							
Kit Carson							
La Plata	26	3	3	22	2	12	0
Lake	8	0	2	8	0	7	0
Larimer	60	5	3	48	8	36	9
Las Animas	4	0		3	1	2	0

<b>Transient Non-Community Water Systems</b>							
<b>County</b>	<b>2006-7</b>			<b>2005-6</b>		<b>2004-5</b>	
	# in	# out	# unknown	# in	# out	# in	# out
Lincoln							
Logan	6	1		5	0	4	0
Mesa	7	1		7	2	5	3
Mineral	11	0	2	10	0	7	7
Moffat	4	0	1	4	0	3	0
Montezuma	4	1		4	1	1	0
Montrose	2	0		2	0	2	0
Morgan							
Otero	1	0					
Ouray	2	0		2	0	2	1
Park	31	1	6	30	2	22	4
Phillips							
Pitkin	9	0		9	0	9	0
Prowers							
Pueblo	8	1	2	6	1	1	1
Rio Blanco	4	0		4	0	3	0
Rio Grande	24	3	4	25	3	18	2
Routt	17	0	5	14	0	11	0
Saguache	4	0	1	4	0	3	0
San Juan	1	0					
San Miguel	2	0		2	0		
Sedgwick	2	0		2	0	2	0
Summit	15	2	3	14	2	12	2
Teller	16	2	1	13	2	11	1
Washington	0	0	2				
Weld	9	1		8	1	8	0
Yuma	3	2		3	2	0	1
# systems	706		53	612		446	
# in/out	665	41		556	56	390	56
% in/out	94	6		91	9	87	13

**Attachment 7:**

**Useful Websites and Contact Information**



Operator Certification Program  
State of Colorado

Contact Information

Water and Wastewater Facility Operators Certification Board  
4300 Cherry Creek Drive South – A5  
Denver, Colorado 80246-1530  
Paul Frohardt, Administrator  
303-692-3468  
[paul.frohardt@state.co.us](mailto:paul.frohardt@state.co.us)

Nancy Horan, Administrative Assistant  
303-692-3463  
[nancy.horan@state.co.us](mailto:nancy.horan@state.co.us)

Water Quality Control Division – Facility-Operator Program  
4300 Cherry Creek Drive South – B2  
Denver, Colorado 80246-1530  
Betsy Beaver, Program Manager  
303-692-3503 (phone)  
303-782-0390 (fax)  
[betsy.beaver@state.co.us](mailto:betsy.beaver@state.co.us)

Lori Billeisen, Program Assistant  
303-692-3510  
[lori.billeisen@state.co.us](mailto:lori.billeisen@state.co.us)

Operator Certification Program Office (OCPO)  
2170 South Parker Road, Ste. 290  
Denver, Colorado 80231  
Teresa Tezak  
303-394-8994 (phone)  
303-394-3450 (fax)

Websites

[www.cdphe.state.co.us/op/ocb](http://www.cdphe.state.co.us/op/ocb) (official Water and Wastewater Facility Operators  
Certification Board website)

[www.ocpoweb.com](http://www.ocpoweb.com) (official OCPO website for announcements, examination schedules and  
application, searchable database of approved training, and useful links)

