STATE OF COLORA

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Colorado Department of Public Health and Environment

OPERATOR CERTIFICATION PROGRAM **ANNUAL REPORT: 2009-2010**

STATE OF COLORADO

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

SUBMITTED TO:

DRINKING WATER/OPERATOR CERTIFICATION **REGION VIII** ENVIRONMENTAL PROTECTION AGENCY

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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, 2009 through April 30, 2010.

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") adopted two amendments to The Water and Wastewater Facility Operators Certification Requirements, 5 CCR 1003-2 ("Regulation 100") during the 2009-2010 reporting period. The amendments were adopted at rulemaking hearings on September 29, 2009 and November 24, 2009, becoming effective November 30, 2009 and January 30, 2010 respectively. The Attorney General's certification has not yet been issued for these rule changes. The full texts of the amendments are presented in Attachment 1 of this document. The amendments are summarized below.

Amendments to Regulation 100, adopted September 29, 2009 (1) and November 24, 2009 (2).

(1) Clarification of the Reference Date for the Determination of Automatic Revocation of Certifications – section 100.13

Colorado's authorizing statute defines the date of automatic revocation of a certification for non-renewal as two years following the date of expiration. Regulation 100 described this date in a variety of ways, including "five years after the issuance of the certification." Under certain circumstances, five years after issuance and two years after expiration may not be the same. This discrepancy is particularly notable when an operator fails to renew a certificate on time and is, therefore, granted a period of less than three years for the new certificate.

In order to clarify that the intent of the statute is to revoke certificates that are not renewed within two years of their expiration, the Board changed all wording concerning the timing and terms of certificate renewal to reference the expiration date of certificates.

The full text of the amendment may be found in Attachment 1.

(2) Amendments to Allow for and to Fund Electronic Certification Examinations – Sections 100.9, 100.11, 100.13, and 100.22

The Association of Boards of Certification has made electronic certification examinations available. After a feasibility study, the Board determined that the availability of electronic testing at the Certification Office ("OCPO") by appointment would be a valuable service to offer the operators of the State.

The Board, therefore, removed all references to "written" as a necessary component of the testing program from Regulation 100. The Board also adopted an "electronic testing fee" of \$35.00 per examination in order to cover the added costs to the Program of offering examinations electronically.

The full text of the amendment may be found in Attachment 1.

Designation of Certified Operators as "Certified Water Professionals"

At its February 2009 meeting, the Board approved a resolution designating all certified operators in Colorado as "Certified Water Professionals". This designation, CWP, may be used by certified operators following their name as an indication of their professional status. The designation will appear on all newly issued and renewed certificates and each certified operator in the state has been given a lapel pin symbolizing their professionalism. The pin is shown below.

After one year of its implementation, this designation has been adopted by a large number of operators. Thus far, it seems that this designation is helping certified operators receive the professional recognition they deserve – both from the public and from their employers and clients.



Section Two Resources

The Water and Wastewater Facility Operators Certification Board ("the Board") is appointed by the Governor of Colorado and 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 requests, 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 assistance and compliance assurance with respect to the certified operator requirement, and for investigating and recommending disciplinary action to the Board.

The division of duties among these groups is shown in Attachment 3.

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. Heather Timms) 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 full-time Environmental Protection Specialist (Ms. Lori Billeisen-Moore). This program is responsible for compliance assistance, compliance assurance and enforcement activities related to facilities; for initiating disciplinary actions related to operator conduct; for providing policy guidance to the Board; and for coordinating operator certification issues with the other activities of the Division.

Other sections within the Water Quality Control Division also 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 classification of

facilities. The database resources of the Division are available to the program, and the Enforcement Unit 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 2009 CECTI and Certification Council rosters are appended as Attachment 4.

Each of these groups provides sub-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. Messrs. Gayle Lammers and Gary Parham serve on ABC's Industrial Wastewater Validation &Examination ("V&E) Committee; Mr. Ray Olson is Chair of the Water Distribution V&E Committee; Mr. Gayle Lammers is a member of the Plant Maintenance V&E Committee, Messrs. Paul Heppler, Jim Medlock, and Mike Scharp are members of the Biosolids/Land Application V&E Committee, and Mr. Richard Platt 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. Kevin Kirkpatrick of CECTI is a member an ABC group examining the possibility of developing reciprocity agreements within the various EPA regions. Additionally, the Certification Council 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 monthly and present substantive written analyses after each certification testing cycle. The 2009 Annual Report of CECTI and the Certification Council is appended as Attachment 5.

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 12,000 individuals who have taken certification examinations. The 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 the database. Updated versions of the 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 April. Operators are provided with an opportunity to update and correct database information. The 2009 mailing included information on the changes to renewal procedures, website and application deadline information, and current information on the program's fee structure. The 2009 mailing also included a CWP lapel pin for each operator (see Section One). The operator response to the annual letter is very high, and the information in the OCPO database is considered both current and reliable. The Facility Operator Program also provides information on changes in operator status discovered during site visits or through other contact with the facility on a routine basis.

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.

<u>System/Operator Database</u>. 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 easily be 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 3,018 systems, of which 788 are community water systems; 141 are consecutive systems; 184 are non-transient non-community water systems; 774 are transient non-community water systems; 301 are water systems which are classified as either "non-public" or "inactive. 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 compliance assurance tracking.

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.

An additional improvement in data collection is envisioned when the Division's Drinking Water Program initiates an electronic entry system for collecting drinking water inventory information. When this system is introduced, it will allow the electronic entry of system contact and operator information. This information will then be automatically routed to both the drinking water and facility-operator programs. The full implementation of this system is expected in the near future.

Other Resources – Water Quality Control Division:

The Enforcement Unit within the Division's Compliance Assurance 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.

Effective in FY 2010, the Enforcement Unit will also receive enforcement referrals from the Facility-Operator Program. This will ensure that all enforcement orders issued by the Division are uniform in format and that they are administered under a similar set of procedures. The Facility-Operator Program will develop the necessary background for the issuance of each enforcement order and will recommend the appropriate civil penalty. This arrangement should streamline the enforcement process and result in an efficient use of program staff.

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 Building Unit. These two groups work together, in cooperation with outside groups, to provide assistance to systems that have financial and technical difficulties. The Capacity Building Unit 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 Building Unit with grant implementation.

Expense Reimbursement Grant:

<u>Direct Reimbursement for Certification Costs.</u> 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. For FY 2009, the ERG direct reimbursement program was expanded to include reimbursement to operators for the costs of continuing education and certification renewal.

All eligible water systems were notified of the expansion 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. Since January 1, 2010, the expanded program has distributed over \$33,000 back to systems and operators.

<u>Expansion of the Availability of Training in Rural Areas.</u> A new education program, coordinated by the Rural Community Assistance Corporation ("RCAC") has been developed to bring an enhanced focus on water quality to water distribution education.

The announcement for the program is in Attachment 6.

This program was developed in response to research showing that the root cause of a large percentage of water system violations was inadequate distribution system operations/practices. The new program will offer a series of three courses, free to the operators of small water systems, at four locations across the state between June 2010 and May 2011. The courses will be offered on site at a larger utility so that there is opportunity for hands-on training and learning. Small system operators completing all three courses will receive a Hach colorimeter free of charge.

The sets of courses will be offered in Boulder twice (Northeast Colorado); in Clifton (Western Colorado) and Dolores (Southwestern Colorado). The first set of courses, scheduled for June – August in Boulder, was filled within two weeks of the opening announcement.

<u>Development of a Water Distribution Simulation Training Site</u>: In order to enhance the availability of water distribution training, the ERG grant is funding an initiative by the Red Rocks Community College Water and Wastewater Management Program to establish a Water Distribution Training Center. The Center will contain a fully developed distribution field which simulates real-world conditions for a wide variety of scenarios.

The Center is currently in the feasibility and planning stages. It should be available for use in training programs by next year.

Establishment of an operator training/resource library. Funded under the ERG grant, 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.

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. Ten such seminars are offered annually. An estimated 600 operators attend these seminars each year. During 2009-10, the Division's Facility-Operator staff is presenting a talk at each seminar on ethics and professionalism, as well as updated certification-related information.

The Program has also presented 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. 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.

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.

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. The OCPO website is 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 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 2009 Annual Report of CECTI, the Certification Council and OCPO is appended to this report as Attachment 6.

Examinations:

<u>Water and Wastewater Treatment</u>: 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 April. The Fall cycle offers examinations between mid-July and October.

This past year there were five sites available for the Fall Treatment examinations (Longmont, Durango, Grand Junction, Leadville, and Pueblo West) and six sites available for the Spring examinations (Colorado Springs, Fort Morgan, Denver, Longmont (x2), Pueblo West, and Rifle). Examinations at Durango and Alamosa are offered every other year in order to maintain geographic coverage while minimizing costs.

<u>Water Distribution and Wastewater Collection</u>: Certification examinations for water distribution and wastewater collection as well as for Small Systems are offered at several locations several times a year. Examinations are offered in May at Longmont, Montrose and Colorado Springs, and in November at Boulder and Montrose. Additionally, all levels of distribution and collection examinations are offered at the Colorado Rural Water Conferences in February and October and following the Leadville operators' school in July.

Examination Source. All examinations are provided by the Associated Boards of Certification (ABC) testing program. All treatment examinations are prescriptive examinations and have a difficulty level which is set above that of the standard ABC examination. Collection and Distribution examinations are ABC standard, multi-entry level examinations.

Examination Data:

Treatment Examinations:

Fall Cycle 2009:

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

Data: All Categories

759 applications received 741 applications approved 642 examinations taken 324 examinations passed

Water TreatmentWastewater Treatment322 examinations taken320 examinations taken173 examinations passed151 examinations passed

Spring Cycle 2010:

Examinations were offered at Pueblo, Colorado Springs, Longmont, Fort Morgan, and Rifle.

Data: All Categories

824 applications received794 applications approved739 examinations taken411 examinations passed

Water TreatmentWastewater Treatment368 examinations taken371 examinations taken215 examinations passed196 examinations passed

Fall Cycle 2010:

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

Distribution and Collection Examinations:

Spring Cycle 2009:

Examinations were held at Colorado Springs, Longmont, Montrose and Pueblo.

Data: <u>All Categories (including Small System)</u>

775 applications received700 examinations taken387 examinations passed

Water DistributionWastewater Collection437 examinations taken223 examinations taken190 examinations passed164 examinations passed

Small System (water and wastewater)

40 examinations taken 33 examinations passed

Fall Cycle 2009:

Examinations were held in August at Leadville and in November at Grand Junction, Longmont and Montrose.

Data: All Categories (including Small System)

641 applications received 571 examinations taken 345 examinations passed

Water DistributionWastewater Collection351 examinations taken192 examinations taken182 examinations passed138 examinations passed

Small System (water and wastewater)

28 examinations taken 25 examinations passed

Spring Cycle 2009:

Examinations are scheduled in May at Longmont, Montrose and Colorado Springs and in July at Leadville. The Certification Council is offering a one day seminar on advanced topics in distribution and collection prior to the Colorado Springs examination. This training opportunity for higher level operators was introduced in May 2007. The seminar continues to be well-attended.

Summary:

Since the adoption of Regulation 100 in 2001, a total of 6,611 operators have qualified for new or upgraded certifications in water distribution (3,736) and wastewater collection (2,875); a total of 5,576 operators have qualified for new or upgraded water treatment (3,156) and wastewater treatment (2,420) 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, 836 operators have qualified for the Small Water System certification.

Table 1: Number of Certification Examinations Passed Since 2001

	2001- 2002	2002- 2003	2003- 2004	2004- 2005	2005- 2006	2006- 2007	2007- 2008	2008- 2009	2009- 2010	Totals
Water Treatment	495	310	292	369	305	353	391	337	304	3,156
Water Distribution	644	370	418	491	321	331	441	348	372	3,736
Small Water System	129	96	75	113	63	65	117	52	126	836
Wastewater Treatment	201	262	186	286	255	266	277	340	347	2,420
Wastewater Collection	507	243	336	380	211	298	308	290	302	2,875

Table 2: Total Number of Active Certifications by Category

Category	Total Active Certifications	2009 by Exam	2009 by Reciprocity
Water "A"	350	40	2
Water "B"	190	31	4
Water "C"	378	70	2
Water "D"	585	115	2
Small Water	457	96	
TNC	82	8	
Distribution 4	846	23	
Distribution 3	85	44	1
Distribution 2	570	114	1
Distribution 1	1,101	177	2

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. All approved courses are listed on the Board's website and on the OCPO website, 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 2009, a total of 1,630 certifications were renewed.

<u>Training Opportunities</u>. The OCPO website, <u>www.ocpoweb.com</u>, 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
2009 to date	53	173	121
2008	33	141	87
2007	112	250	114
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:

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.

Community Water Systems: There are currently 927 community water systems, including consecutive systems, and 184 non-transient non-community water systems in the system/operator database. Of these 1,111 systems, 1,088 systems (98%) are currently under the supervision of a water treatment operator certified at the appropriate level. An additional 10 systems (1%) are operating under a valid compliance schedule that requires them to be under the supervision of a certified operator by a specified date. The remaining 11 systems (1%) are not in compliance with the fundamental operator certification regulation. Although the number of systems without a certified operator has remained the almost same since the last report, the identity of the systems currently out of compliance has changed. Summary charts showing current system compliance with the certified operator requirement are shown in Attachment 7.

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 4, below, illustrates the trend in system compliance since the 2004-5 reporting period:

Non-Transient Non-Community Systems. The 2004 annual report noted a significant concern about the number of schools and day-care centers (all of them 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 73 schools and day-care centers in the state that are also public water systems, 72 are now in full compliance and 1 is operating under a valid compliance schedule. An area of continuing concern is the rapid growth of "man-camps" associated with the oil and 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 has developed a representative inventory of these camps and has also developed guidelines, including the necessity for certification, for the water haulers who serve the camps.

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
2009-2010	927	916	11	98.8%
2008-2009	926	914	12	98.7%
2007-2008	902	880	22	97.5%
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
2009-2010	184	182	2	98.9%
2008-2009	179	178	1	99.4%
2007-2008	171	168	3	98%
2006-2007	178	173	5	97%
2005-2006	165	161	4	97%
2004-2005	161	137	24	80%

Geographic Distribution of Compliant Water Systems. Charts showing the compliance status of water facilities within each county in Colorado for the past six reporting periods are appended in Attachment 7. "In" facilities are considered to be those to be operating either with fully certified operators on staff or under contract or with a valid compliance schedule in place. Each type of public water facility is shown with the number of "in" facilities and the number of "out" (no operator) facilities for each county. For example, Adams County currently has 39 community water facilities, 39 of which are "in". The number in parentheses shows that 2 of the 39 facilities are operating on a compliance schedule. This result is tabulated in the first two columns of the "Community Water System" chart. Similar data for the 2007-8, 2006-7, 2005-6 and 2004-5 periods are shown in columns to the right of the current year. Statewide totals are shown at the bottom of each chart. These data include both water treatment and 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 2-5% 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 6. Even though these systems are not required to have a certified operator under the Federal guidelines, they are required to do so 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 10. In 2002, there were an estimated 868 Transient Non-Community systems categorized as "status unknown".

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

	# of systems with status known	# compliant or with valid compliance schedule	# not in compliance	% compliant or with valid compliance schedule	Additional # with status unknown
2009-2010	767	750	17	97.8%	7
2008-2009	778	761	17	98%	9
2007-2008	741	717	24	97%	19
2006-2007	706	665	41	94%	53
2005-2006	612	556	56	91%	147
2004-2005	446	390	56	87%	~250

<u>Future</u>. The Division has completed a detailed policy on the escalation of enforcement efforts for non-compliance. The policy is currently pending approval. The final draft of the policy is included as Attachment 8 in this report. The available pre-enforcement steps (inquiry, advisement/compliance schedule) have already been exhausted for several chronically out-of-compliance water systems. When given final approval, the tools available under the policy will be applied to these systems, and enforcement action will be taken where appropriate.

Summary:

At the present time, Colorado estimates that 99% of Community and Non-Transient Non-Community water systems are either in full compliance with the operator certification requirement (98%) or are operating under an agreed upon schedule for attaining compliance (1%). 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 Six 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 eleven disciplinary cases against individual operators.

<u>No Action</u>. 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.

<u>Letters of Reprimand</u>. In three cases, 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 and 2010). In the other case, the operator reached a consent agreement with the Board to accept a letter of reprimand, to improve reporting practices, and to attend advanced training (2007).

<u>Suspension</u>. 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. Four cases involving revocation of certification were brought before the Board. In two of these cases, the operators' certifications were revoked (2001, 2003). In a third 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). In the fourth case, two of the operator's certifications were invalidated as having been obtained by mis-stating the operator's experience level (2010).

<u>Current Action</u>. One potential disciplinary action case is under investigation. It may involve the invalidation of a certification obtained under fraudulent conditions. (2010)

<u>Informal Action.</u> The Division routinely sends certified letters of 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 that the operator must take positive steps to address the noted problems. During 2009-2010, 43 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 10 Community and Non-Transient Non-Community water systems currently without a certified operator and not operating under a compliance schedule. These systems continue to be contacted and their overall compliance records 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 formal enforcement action during the summer of 2010.

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 thirty years; some – every sixty days. The program is striving to make each system aware of the need to report these changes and to find new operators within a short time. 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. Currently only 51 operators holding restricted certifications are listed as operators in responsible charge of public water or wastewater systems. 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 2010-11 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, with respect to education as a partial substitute for experience, resulted in the amendments to section 100.9 and 100.12 of Regulation 100 in 2007 and the revision of industrial wastewater certification requirements in 2008 resulted from a stakeholder process.

In early 2011, the Division will begin a comprehensive review of Regulation 100 with results to be presented to the Board for its consideration. This process will involve a variety of stakeholder groups including representatives of water and wastewater systems as well as representatives of the operator community.

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, examination scheduling, training unit approvals 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 this conference is 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.

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 contain certification news and encourage operators to make comments on the administration of the program.

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Section Nine Program Review

Contract Review and Renewal:

The Board's current contracts with CECTI and the Certification Council were renewed effective July 1, 2009 through June 30, 2014. The Board has reviewed the assignment of duties within the contracts and determined that all necessary administrative aspects of the certification program are covered adequately.

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 and training opportunities. The Division continues 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 current legislation authorizing the program includes a sunset date of June 2014. 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 2010-2011 reporting period. This review will occur in conjunction with a systematic review and revision of Regulation 100. The review will involve a combination of questionnaires, interviews, stakeholders meetings, and internal commentary. Following this review, the Board will receive recommendations for amendments to Regulation 100 as well as a summary report recommending non-regulatory program changes and improvements.

STATE OF COLORADO

OPERATOR CERTIFICATION PROGRAM ANNUAL REPORT: 2009-2010

ATTACHMENTS

Attachment 1:

Amendments to 5 CCR 1003-2

Water and Wastewater Facility Operators Certification Requirements

Regulation 100

Amended September 29, 2009 (1)

Amended November 24, 2009 (2)

(1) Amendment to Regulation 100 – September 29, 2009

100.13 <u>CERTIFICATES</u>

- 100.13.1 Upon satisfactory fulfillment of the requirements of this regulation, the Board or its designee shall issue award to the applicant a certificate designating the appropriate certification level. Newly awarded operator certificates shall be valid for three years unless revoked or suspended as provided in section 100.23 of these regulations.
- 100.13.2 Operator certificates shall be valid for three years unless revoked or suspended as provided in section 100.23 of these regulations. Operators may seek renewal of a certificate by submitting a written application for renewal to the Board or its designee prior to the expiration date of the certificate. Renewed certificates shall be valid for three years from the date of expiration of the prior certificate, not from the issue date of the renewed certificate.
- 100.13.3 Renewal applications must demonstrate that the operator satisfies the requirements of this regulation including meeting the renewal training unit requirements stated in section 100.14 of this regulation. See §100.25 for transitional renewal training unit requirements for certifications expiring prior to January 30, 2004.
- 100.13.4 The Board or its designee shall provide all application forms for renewal of certificates.
- 100.13.5 Any certificate not renewed by the operator expires on the third anniversary of its issuance. Following expiration of the a certificate, the operator shall not represent that he or she holds a certificate in the class for which the certificate expired and no operator of a water or wastewater facility shall operate a facility in reliance on the expired certificate.
- 100.13.6 An operator may apply for renewal for two years following expiration of the certificate. The Board or its designee will renew the certificate if the operator pays the renewal fee and satisfies all applicable requirements. Certificates which are renewed after their expiration date shall be valid for three years from the date of expiration of the prior certificate, not from the issue date of renewed certificate. Any certificate not renewed by the operator prior to the fifth anniversary of its issuance is automatically revoked. Any operator whose certificate is revoked shall be treated as a new applicant for purposes of this regulation and must meet all the initial certification requirements.
- 100.13.7 Any certificate not renewed by the operator prior to the fifth anniversary of its issuance within two years of its expiration is automatically revoked. Any operator whose certificate is revoked shall be treated as a new applicant for purposes of this regulation and must meet all the initial certification requirements.

<u>100.13.8</u> 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.

(2) Amendment to Regulation 100 – November 24, 2009

100.9 QUALIFICATIONS AND CLASSIFICATIONS FOR CERTIFICATION OF OPERATORS

*

100.9.6 Operators shall be classified according to the type of facility they are certified to operate. An applicant must pass a validated written examination designated for the type and level of facility that he or she seeks to be certified to operate. Except as provided in subsection 100.9.8, to qualify to sit for an examination, an applicant must have the required minimum experience or cross-experience as designated in the table below. Small system water or wastewater operator requirements are the same as for Class D and Class 1 below. There is no minimum experience requirement for certification as a Transient Non-community Water System Operator as described in section 100.19.2. For purposes of this section, domestic and industrial wastewater treatment facility experience shall be considered interchangeable.

100.9.7 EXPERIENCE REQUIREMENTS FOR OPERATORS TABLE

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

100.9.8 Special rules for satisfying the minimum experience requirements of this regulation:

(a) Class D Operators:

- (i) Applicants for certification as Class D Operators of water or wastewater treatment facilities may take the Class D examination before accruing the necessary experience for the issuance of a certificate.
- (ii) The Class D certificate will then only be issued upon a showing of satisfactory experience to the Board or its designee, as well as passage of a validated written exam the Class "D" examination.

- (iii) The required experience may be accrued under the supervision of a certified operator, through on the job training with a certified operator, or through an apprenticeship with a contract operator who is certified. The required experience may also be accrued through the successful completion of an on-site or correspondence training course, approved by the Board or its designee, which is designed to prepare the Class D Operator to operate Class D facilities.
- (iv) Any education courses used to satisfy the basic experience requirement for a Class D Operator certification may not be used to satisfy the certification renewal requirements for that same certification.

(b) Class 1 Operators:

- (i) Applicants for certification as Class 1 Operators of water distribution or wastewater collection systems may take the Class 1 examination before accruing the necessary experience for the issuance of a certificate.
- (ii) The Class 1 certificate will then only be issued upon a showing of satisfactory experience to the Board or its designee, as well as passage of a validated written exam the Class "D" examination.
- (iii) The required experience may be accrued under the supervision of a certified operator, through on the job training with a certified operator, or through an apprenticeship with a contract operator who is certified. The required experience may also be accrued through the successful completion of an on-site or correspondence training course, approved by the Board or its designee, which is designed to prepare the Class 1 Operator to operate a Class 1 system.
- (iv) Any education courses used to satisfy the basic experience requirement for a Class 1 Operator certification may not be used to satisfy the certification renewal requirements for that same certification.

100.10 APPLICATION FOR CERTIFICATION

*

100.11 EXAMINATIONS

100.11.1 The Board or its designee shall oversee the preparation and administration of validated written examinations to be used in determining whether or not the applicant has the necessary skills, knowledge, ability and judgment appropriate for the level of certification sought.

- 100.11.2 Examinations shall be held at places and times set by the Board or its designee. Advance announcements of the date and locations of examinations shall be made by the Board or its designee.
- 100.11.3 All examinations shall be written <u>or administered electronically</u>, except in such cases as the Board or its designee decide, on a case-by-case basis, represent proper exceptions to the general rule that all examinations shall be written to this requirement.
- 100.11.4 All examinations will be graded by the Board or its designee, and the applicants shall be notified of the results.

100.13 CERTIFICATES

- 100.13.1 Upon satisfactory fulfillment of the requirements of this regulation, the Board or its designee shall issue to the applicant a certificate designating the appropriate certification level.
- 100.13.2 Operator certificates shall be valid for three years unless revoked or suspended as provided in section 100.23 of these regulations. Operators may seek renewal of a certificate by submitting a written an application for renewal to the Board or its designee prior to the expiration date of the certificate.

*

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 validated 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.

*

100.22 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.
- Program fees shall consist of the following.
 - (a) Examination fees in the amount of \$45.00 will be charged for each examination the applicant signs up to take. Examination fees are based on the cost of preparing, administering, and scoring the certification examination.
 - (b) An additional fee of \$35.00 per examination will be charged applicants who choose to take certification examinations electronically. This fee is

based upon the added cost to the program of making electronic testing available.

- (bc) 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) \$55.00 for each new certification by examination; and
 - (ii) \$70.00 for each renewal certification and each new certification by reciprocity.
- (ed) There shall be a \$20.00 fee to cover the cost of replacing certification documentation.
- (de) Training unit approval fees shall be \$50.00 for each course submitted for review, except that: * * *

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Attachment 2:

Roster: Water and Wastewater Facility

Operators Certification Board

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Water and Wastewater Facility Operators Certification Board 2009 Roster

Coyne, Allen E. - Vice-Chair Town Manager, Julesburg

Hayes, Rich Colorado Rural Water Association, Executive Director

Hillery, Jeannette - Chair League of Women Voters, Boulder

Leslie, Scott - Secretary Environmental Process Controls, Carbondale

Parham, Gary Lockheed Martin Corporation, Denver

Rygh, Garth Denver Water, Superintendent of Water Control

Schaffer, Thomas (non-voting) Colorado Department of Public Health and Environment

Settle, Tom City of Westminster

Walker, Steve Carollo Engineering

Wright, Bill City of Sterling, Utilities Director

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

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Attachment 3:

Program Structure:

Relationship among the Water Quality Control Division, the Water and Wastewater Facility Operators Certification Board, CECTI, the Certification Council, and the Operator Certification Program Office

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Water and Wastewater Facility Operators Certification Board (Governor-Appointed)

Regulation Policy Appeals

Colorado Environmental
Certification & Testing, Inc.
(RMSAWWA, RMWEA
and CRWA)
VOLUNTEERS!

Colorado Water Distribution & Wastewater Collection Certification Council (C&D Council) VOLUNTEERS!

Treatment

Applications
Examinations
Training Approvals
Renewals
Reciprocity

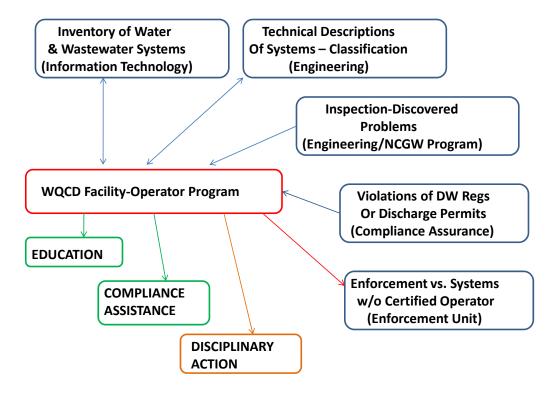
Operator Certification Program Office

> Fee Acceptance Tracking Application Screening Exam Administration

Distribution/Collection

Applications
Examinations
Training Approvals
Renewals
Reciprocity

WATER QUALITY CONTROL DIVISION



Attachment 4:

Rosters: Colorado Environmental Certification and Testing, Inc.

and

The Colorado Water Distribution and Wastewater Collection Systems Certification Council

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Colorado Environmental Certification and Testing, Inc. 2009 Roster

Biberstine, Jerry – Secretary Colorado Rural Water National Rural Water

Dye, Bob – Vice-President Rocky Mountain Section AWWA Littleton/Englewood Utilities

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

Heppler, Paul Rocky Mountain Water Environment Association City of Boulder

Kirkpatrick, Kevin – President Rocky Mountain Section AWWA Colorado Rural Water Association

Maxey, Steve Rocky Mountain Water Environment Association Metropolitan Wastewater Reclamation District

McMillan, Danny Colorado Rural Water Association Town of Cheyenne Wells

Oligo, Bobby Rocky Mountain Section AWWA City of Aurora

Smith, Julie Rocky Mountain Water Environment Association MillerCoors Industries

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

Colorado Water Distribution and Wastewater Collection Systems Certification Council

2009 Roster of Officers

Olson, Ray – General Chairman Town of Castle Rock

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 Castle Rock

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

Attachment 5:

2009 Annual Contractors' Report to the Water and Wastewater

Facility Operators Certification Board

(This report is available elsewhere on the WWFOCB Website and is not included here because of its length)

Attachment 6:

Brochure for

"Water Quality and Distribution System Essentials and Best Practices"

A Series of 3 Courses for Small Water Systems

Offered at 4 Locations June 2010 through May 2011

Funded under auspices of the EPA Expense Reimbursement Grant



RE-REGISTRATION IS REQUIRE

Please register in advance as dass size for each worlshop is **limited to 30 people**. Profity will be given to smaller water systems **Lunch will be provided.** More specific information on course locations will be included in later announcements as the includual worlshops approach. Please **complete one form for each person** who will attend You can also **register confilted at www.coc.org** urder follings and been;

pecial needs, if you have special needs addressed by the Americans with Disabilities Act, please notify RCAC at 916/44?* 882 ext. 1009 at least three weeks prior to the workshop(s) you are attending, so that we may make accommodations for you.

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Best Practices for Maintaining Distribution System Water Quality August 24 - 25, 2010 - Boulder, CO	Best Practices for Maintaining Distribution System Water Quality November 16 - 17, 2010 - Clifton, CO	Bast Practices for Maintaining Distribution System Water Quality February 8 + 9, 2011 + Boulder, CO	Bast Practices for Maintaining Distribution System Water Quality May 3 - 4, 2011 - Dolores, CO
☐ Water Quality and Storage Facilities July 7, 2010 · Boulder, CO	☐ Water Quality and Storage Facilities October 13, 2010 - Clifton, CO	■ Water Quality and Storage Facilities January 12, 2011 • Boulder, CO	Water Quality and Storage Facilities April 6, 2011 - Dolores, CO
Water Quality and Distribution System Essentials June 8 = 9, 2010 • Boulder, CO	Water Quality and Distribution System Essentials September 8 - 9, 2010 • Clifton, CO	Water Quality and Distribution System Essentials December 7 - 8, 2010 - Boulder, CO	Water Quality and Distribution System Essentials March 8 - 9, 2011 - Dolores, CO

Credit Card Information

ach workshop has a fee of \$141/student for two-day courses and \$90/student for one-day.

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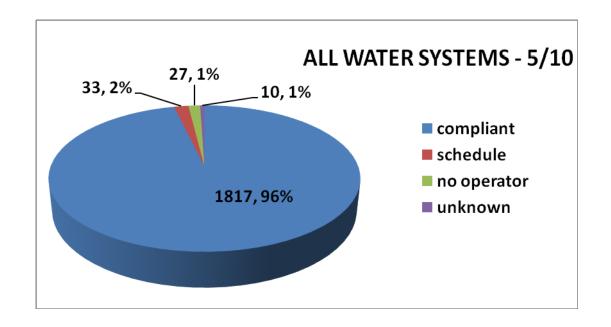
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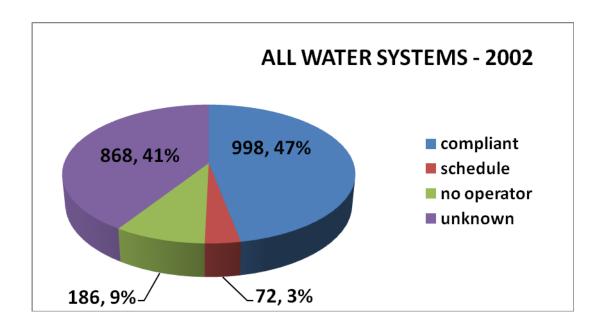
3120 Freeboard Drive, Suite 201 West Sacramento, CA 95691

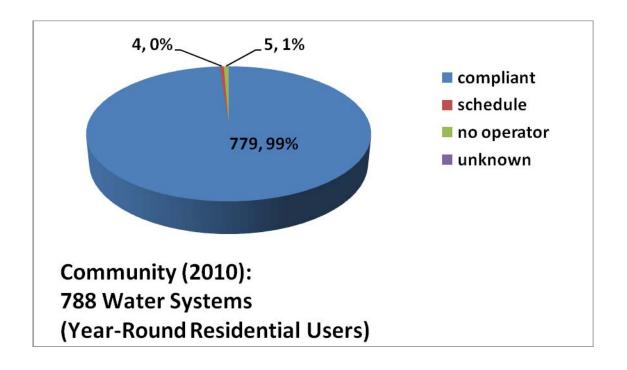
stration questions, contact Mark Wiseman, 9 for 47-982, each 1029 or by e-mail at MWiseman@roacog. For content questions, contact Bill Hogiewe at 303/545-0564 or by e-mail at WMogrew@roacog.

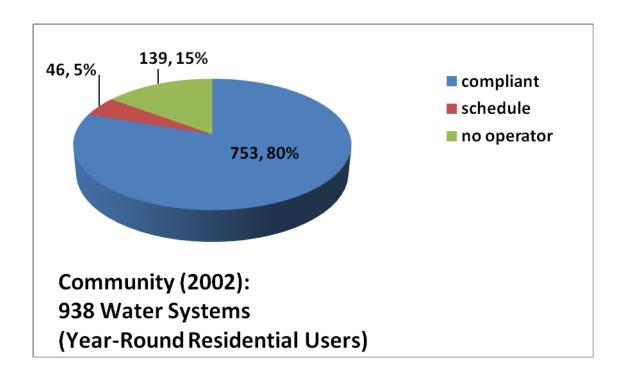
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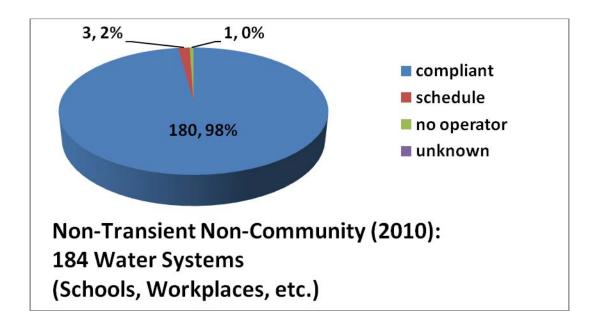
Water System Compliance Data

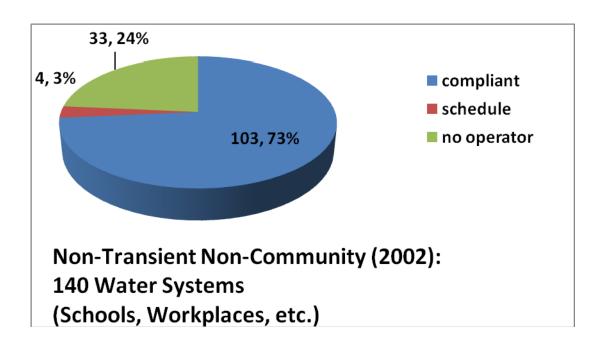


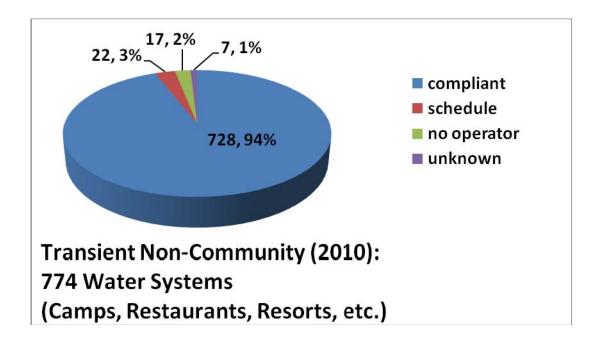


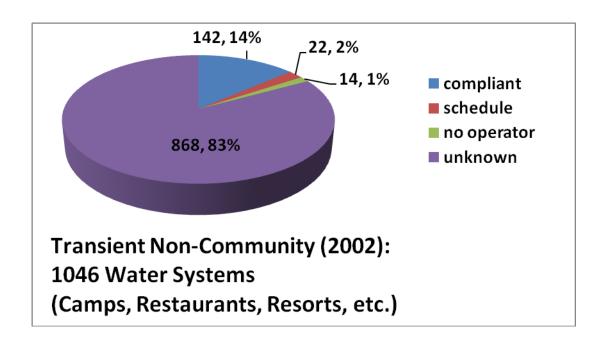


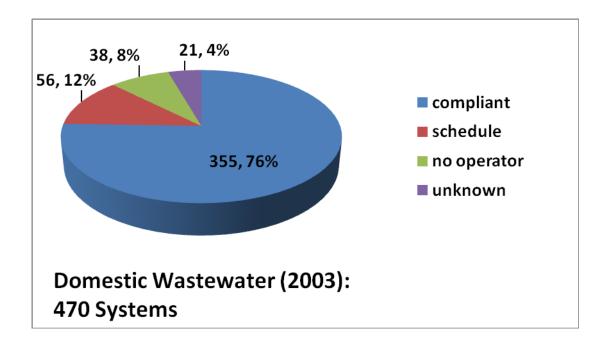


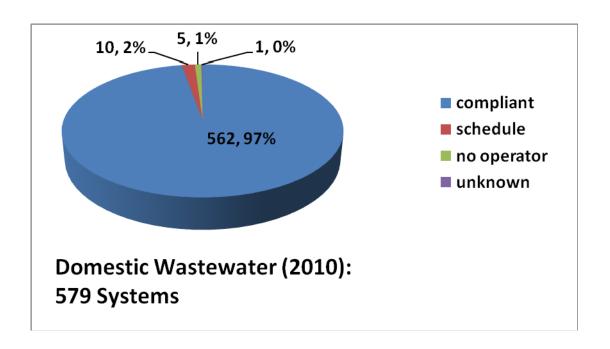








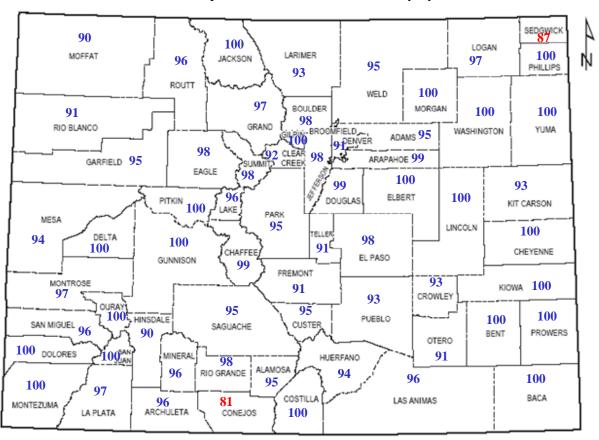




Attachment 8:

State of Colorado Water System Compliance Data by County

Water & Wastewater Systems Full Compliance Data 5/1/2010 (%)



Attachment 9

Draft Enforcement Response Guidance Water Quality Control Division Facility-Operator Program

Compliance Assurance and Enforcement Response Guidance: Facility-Operator Program, Water Quality Control Division, Colorado Department of Public Health and Environment

This document is designed to provide a framework within which the staff of the Facility-Operator Program of the Water Quality Control Division ("the Division") operates in order to bring water and wastewater systems into compliance with the requirement that each water and wastewater system be placed under the direct supervision of an appropriately certified operator in responsible charge ("ORC"). This document also defines the points at which a water or wastewater system is referred to the Division's Enforcement Unit for formal administrative action.

The Guidance has been developed to reflect the requirements of the Water and Wastewater Facility Operators Certification Statute, C.R.S. 25-9-101, *et seq.*, and the Water and Wastewater Facility Operators Certification Requirements, 5 C.C.R. 1003-2. The basic requirement of both the statute and regulation is as follows: "no owner of a water or wastewater facility shall allow the facility to be operated without the direct supervision of an operator in responsible charge certified in a classification equivalent to or higher that the classification of the facility", section 100.21.1, 5 C.C.R. 1003-2 ("the certified operator requirement").

Part I: Systems

A. New Systems or Systems reported to be without an operator:

Water or wastewater systems newly entered into Division tracking databases or systems for which the Program has received unconfirmed information indicating that they are not, or are no longer, under the supervision of a certified operator will be contacted by certified mail. This letter of inquiry will reference the statutory requirement for supervision by an appropriately certified operator and indicate the current classification of the system, as reflected in Division records, with respect to this requirement. Systems will be given a 10 day period within which they must either complete and return a form designating a certified operator or contact the Program to arrange for a Compliance Schedule (see part B below).

Water or wastewater systems for which the Program receives confirmed information that they are not under the supervision of a certified operator (for example, following an inspection or sanitary survey) will be sent a Compliance Advisory (see part C below). When a system evidences a recurring failure to meet the certified operator requirement, the letter of inquiry need not be sent. Absent compelling circumstances provided by the system, the Program will issue a Compliance Advisory immediately upon receipt of notification, by the operator, of the termination of his/her employment (see part C below). A system which fails to respond to a letter of inquiry will be sent a Compliance Advisory (see part C below).

B. System responds to the letter of inquiry with a request for assistance/time to obtain the services of a certified operator:

A system responding to the letter of inquiry with a request for time to obtain the services of a certified operator may be issued a Compliance Schedule. Compliance Schedules are issued by certified mail.

A Compliance Schedule is a corrective action plan and schedule which recognizes the fact that the system is currently in violation of the certified operator requirement but is moving toward full compliance by meeting the requirements of the corrective action plan within the prescribed time frame. A Compliance Schedule requires that the system come into compliance with the certified operator requirement by a date certain. The enforcement discretion exercised under a Compliance Schedule is subject to nullification if the system is cited for significant violations of other drinking water and/or wastewater regulations.

A Compliance Schedule is issued at the discretion of the Program. Factors which may affect the decision to issue a Compliance Schedule include the compliance history of the system, particularly with respect to health-related violations; the experience/expertise of the system staff; the availability of certified operators in the system's area; the system's demonstrated efforts to fill the vacancy in a timely manner; and the size and complexity of the system. Systems which are denied a Compliance Schedule will be issued a Compliance Advisory (see part C below).

The ordinary term of a compliance schedule is 30 days. If it is foreseeable that the time required for the system to come into compliance will exceed 30 days, ordinarily because a staff member needs to register for and take a certification examination, a Compliance Schedule may be issued for a period not to exceed the close of the next available examination cycle. In this case, the system will be required to designate the staff member who will obtain certification and to designate a fully certified operator who has agreed to act as consultant and emergency contact for the system for the term of the Compliance Schedule.

Systems will be notified of the pending expiration of Compliance Schedules. Systems which fail to respond by the expiration date of the Schedule shall be sent a Compliance Advisory (see part C below). Systems who request an extension of a Compliance Schedule and whose request is denied shall be sent a Compliance Advisory (see part C below).

Except under compelling circumstances, Compliance Schedules will not be extended for more than 30 days beyond the initial term of the Schedule. For example, a Compliance Schedule may be extended for more than 30 days if the designated staff member took and failed to pass the required certification examination. In most other circumstances, the additional 30 days will allow the system adequate time to arrange for the services of a certified operator. Prior to any extension of a Compliance Schedule, the system must verify that a designated certified operator remains available to the system as a consultant and emergency contact.

A Compliance Schedule will be extended only after a review of the system's compliance record indicates satisfactory compliance with other requirements.

C. System fails to respond to letter of inquiry, is denied a Compliance Schedule or does not meet the conditions of a Compliance Schedule:

A Compliance Advisory (1) will be issued to systems which fail to respond to the letter of inquiry; which fail to meet the conditions of a Compliance Schedule; or which are denied either a new or extended Compliance Schedule.

A Compliance Advisory (2) will also be issued to systems whose violation status is noted in a formal sanitary survey or other inspection performed by Division personnel.

A Compliance Advisory notifies systems of their violation status and advises that failure to respond may result in an enforcement action.

A Compliance Advisory references the date of violation (see part A above); lists previous relevant communications between the Program and the system; details the potential for formal enforcement action and administrative penalties; and requires compliance with the certified operator requirement by a date certain. Systems will be given a 15 day period within which they must (1) obtain the services of an appropriately certified operator in responsible charge and so notify the Program or (2) negotiate and implement a Compliance Schedule, a corrective action plan and schedule designed to move the system toward full compliance by a date certain.

Failure to respond to a Compliance Advisory or failure to obtain the services of an appropriately certified operator in the allowed time will result in the referral of the system to the Enforcement Unit of the Compliance Assurance Section for formal administrative action.

D. Formal Administrative Action (Enforcement Unit of the WQCD Compliance Assurance Section)

Systems which fail to attain compliance with the certified operator requirements as a result of the processes described above will be referred to the Division's Enforcement Unit for formal administrative action. An Enforcement Order for failure to comply with the certified operator requirement as a stand-alone violation will be issued under the ordinary procedures of the WQCD Enforcement Unit. Such Orders will include an administrative penalty calculated in accordance with the Penalty Assessment Tables in the document "Administrative Penalty Policy: Water Quality Control Division Facility-Operator Program.

The failure to have an appropriately certified operator in responsible charge will generally be added as a violation in other Enforcement Orders issued by the Division. If a system operating under a Program Compliance Schedule is issued an Enforcement Order for other violations occurring during the term of the Compliance Schedule, then the Compliance Schedule will be nullified and the failure to comply with the certified operator requirement will generally be added as an included violation in the Enforcement Order issued to the system as a result of these violations.

Part II: Operators

Operator in Responsible Charge with expired certification(s)

If an operator notifies the Program that her/his certification has expired or will expire before renewal, the Program may issue a Compliance Schedule (Bridge Letter) to the system. The term of the Schedule will be determined by mutual agreement among the Program, the system and the operator. The usual requirement for the system to arrange for consultation and emergency services by a certified operator will be waived in light of the current operator's demonstrated ability to hold the appropriate certification.

Compliance Schedules issued to allow the renewal of an operator's certification will note the date of violation as the date of expiration of the operator's certification.

Should the operator fail to meet the renewal deadline set by the Compliance Schedule, a Compliance Advisory will be issued requiring the system to provide documentation of the operator's renewal or to designate a new operator in responsible charge (see section I, part C above).

If the Program determines, without operator notification, that a system is operating under the responsible charge of an operator with an expired certification, the system and the operator will be notified and required to respond within 10 days. Upon response, a Compliance Schedule may be issued as above.

If no response to a notification of expiration is received, a Compliance Advisory will be issued requiring the system to provide documentation of the operator's renewal or to designate a new operator in responsible charge.

Failure to meet the requirements of a Compliance Advisory issued for operation of a system by an operator with an expired certification will result in the referral of the system for formal enforcement. In the absence of other violations, the Program may request that the penalty associated with the Enforcement Order be waived or limited to the base penalty.

Failure to meet the requirements of a Compliance Advisory issued for operation of a system by an operator with an expired certification will result in the referral of the operator to the Water and Wastewater Facility Operators Certification Board for a letter of reprimand.

Notice. The procedures set out in this document are intended solely for the guidance of Division personnel. They are not intended and cannot be relied upon to create rights, substantive or procedural, enforceable by any party in litigation with the Division. The Division reserves the right to act at variance with this policy if warranted by the particular facts in question. The Division also reserves the right to change this policy at any time with appropriate notice and publication.

Compliance Assurance and Enforcement Guidance: Administrative Penalty Assessment Guidance and Calculations

Facility-Operator Program, Water Quality Control Division, Colorado Department of Public Health and Environment

<u>Introduction</u>. Administrative base and time-adjusted penalties assessed under the Facility-Operator Program are designed to negate the economic benefits that may accrue to a water or wastewater system by failing to place the system under the supervision of a certified operator. Additional penalties may be assessed if the system has placed its public in actual or potential risk during the time it was not under the supervision of a certified operator.

Although the maximum penalty authorized under Colorado statute (C.R.S. 25-9-110(5)) is \$300 per day of violation, the penalty structure established in this guidance document is based on rates charged by reputable multiple-system operators for full service on a monthly basis. These rates, and the penalties derived from them, vary with the size and complexity of the affected system. There are no provisions for a daily computation of penalties simply because a day is too fine a time scale for certification violations — months and fractions thereof are a more useful computation unit. The penalty structure as designed is for "stand alone" violations wherein the enforcement action addresses the failure to place the water or wastewater system under the supervision of a certified operator as the principal subject of the action.

If judicial action is necessary to resolve issues with a water or wastewater system, the Division reserves the right to adjust any penalties originally assessed in an administrative enforcement order to the system.

Penalty Assessment Tables

Section A: Base Penalty

Table A (1): Base Penalty Table for Violation of the Certified Operator Requirement for drinking water and domestic wastewater systems. Penalties listed are for water <u>or</u> wastewater systems; for systems in violation with respect to <u>both</u> water and wastewater, multiply the penalty in table A(1) by 1.3.

Population	System Classification*				
(served or affected)	T	D	C	В	A
under 101	\$150	\$175	\$250	\$500	n/a
from 101 to 500	n/a	\$175	\$250	\$500	n/a
from 501 to 3,300	n/a	\$250	\$500	\$750	n/a
from 3,301 to 25,000	n/a	\$500	\$750	\$1000	\$2000
from 25,001 to 100,000	n/a	n/a	\$2500	\$3000	\$3500
over 100,000	n/a	n/a	\$3500	\$4000	\$5000

^{*} See Regulation 100, Sections 100.4 and 100.5 (5CCR 1003-2)

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Table A(2): Base Penalty Table for Violation of the Certified Operator Requirement for industrial wastewater facilities

Classification*	Base Penalty
D	\$175 - \$500**
C	\$500 - \$1000**
В	\$750 - \$3500**
A	\$3000 - \$5000**

^{*}See Regulation 100, Section 100.6 (5CCR 1003-2).

Section B: Time-Adjusted Penalty

The Time-Adjusted Penalty accounts for the duration of the violation and is calculated from the date of the onset of violation as determined in the Enforcement Order. The Time-Adjusted Penalty is calculated by multiplying the number of months (including fractions thereof) of violation by the appropriate Base Penalty.

Section C: Public Health/Environmental Penalty

The Public Health/Environmental Penalty ("PHE") is calculated from the date of the onset of violation as determined in the Enforcement Order. The PHE factor, F_1 , for potential risk to public health and environment is determined by the number of recorded violations of the Primary Drinking Water Regulations; the number of significant violations of Discharge Permit conditions; or the number of unresolved significant deficiencies noted on sanitary survey or inspection reports. The PHE factor, F_2 , for actual (historical) risk to public health and environment is determined by the number of interventions, such as boil/bottle water orders, cease and desist orders, etc. to which the system has been subject.

The Public Health/Environmental Penalty may be adjusted, at the discretion of the Division, to take into account mitigating factors, such as an official "return to compliance" designation (drinking water) or evidence of immediate correction of discharge permit violations or significant deficiencies from sanitary surveys or inspections.

^{**}The range of base penalties is designed to reflect the variety of sizes and types of facilities and the wide variety of potential and actual environmental and public health risks that could result from the failure of such a facility.

Table C: Public Health/Environmental Penalty Table

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interventions	F_1	F ₂
1-2	0.10^{-}	$0.\overline{20}$
3-4	0.15	0.30
5-6	0.30	0.60
>6	0.50	1.00

^{*}Separate violations are generally issued for each member of a group of contaminants, such as Inorganic Chemicals, Volatile Organic Chemicals, etc.

For purposes of the calculation of the PHE factor, failure to monitor for a group of contaminants shall be counted as a single violation.

The total Public Health/Environmental Penalty factor, F, shall be F = 1 + (F1 + F2). The Base Penalty obtained from Table A shall be multiplied by F to obtain the Public Health/Environmental Penalty.

Table D: Sample Calculation.

<u>Situation</u>: System X is a class "C" water <u>and</u> wastewater system serving 2,000 people. The system has been determined to be out of compliance for 6 months. During that time, the system received one notice of a permit violation, one monitoring violation, violations for failure to monitor inorganic contaminants, and one boil/bottle water order.

Sample Penalty Calculation:

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Base Penalty from Table A(1):
    class "C"/2,000 people: $750
    both water and wastewater: x = 1.3
    Base penalty: $750 \times 1.3 = $975

Time-Adjusted Penalty = Base Penalty x = $975 \times 6 = $
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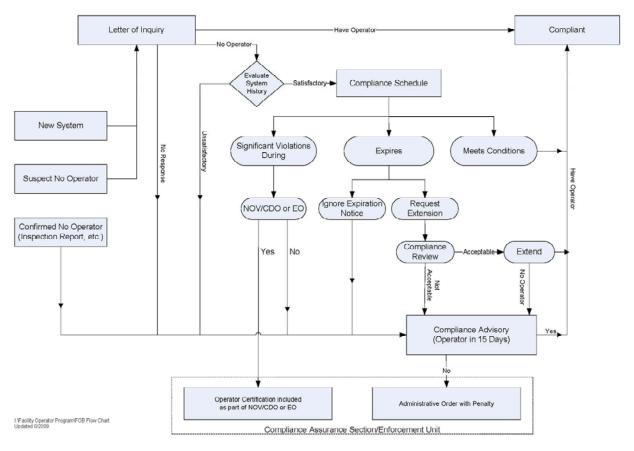
Section D: Work Sheet for Penalty Calculation

System Name:		
PWSID#:	Permit#:	
Administrative Ac	ction ID Number:	
Action with respec	ct to: Water Wastewat	er Both Water and Wastewater:
Base Penalty:	System Type: Population Served: see Table A	Base Penalty:
Time Adjustment:	Violation Dates from:	to = # of months:
(1) Time-Adju	sted Penalty = Base Penalty _	times # of Months
		= Time-Adjusted Penalty:
Public Health/Envir	ronmental Penalty: Violations (list below):	(see Table C) F ₁ :
Number of 1	Interventions (list below):	(see Table C) F ₂ :
		PHE factor: $1+F_1+F_2$:
(2) Public Hea	lth/Environmental Penalty =	Base Penalty times PHE factor
	= Public	: Health/Environmental Penalty:
Total Penalty = Time-Adjusted Penalty	enalty plus Public	Health/Environmental Penalty
(3) Total Pena	lty:	

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WQCD Facility Operator Program Compliance Assurance and Enforcement Guidance



Attachment 10:

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

Heather Timms, Administrative Assistant 303-692-3463 heather.timms@state.co.us

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Betsy Beaver, Program Manager 303-692-3503 (phone) 303-782-0390 (fax) betsy.beaver@state.co.us

Lori Billeisen-Moore, Environmental Protection Specialist 303-692-3510 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) teresat@geteams.com

Websites

www.cdphe.state.co.us/op/ocb (official Water and Wastewater Facility Operators

Certification Board website)

<u>www.ocpoweb.com</u> (official OCPO website for announcements, examination schedules and application, searchable database of approved training, and useful links)