

Public Water Systems Operator Regulations

Brief Summary of the Proposed Rule

The change in this proposed rule, which governs the examination and certification of operators of public water systems, is to correct an error in language passed during the 2001 session regarding Class 1D operators (under 5.3.c.s.), and update the penalty section to reflect current code.

Public Water Systems Operator Regulations

Statement of Circumstances for the Proposed Rule

The proposed regulation revision is to add language omitted during the 2001 legislative session. The additional duties of Class 1D operators under 5.3.c.2. was a compromise agreed upon by the department and the water industry, but was inadvertently omitted by staff of a legislative committee.

REVISED FISCAL NOTE FOR PROPOSED RULES

Rule Title: Public Water Systems Operator Regulations, Title 64 Series 4.

Type of Rule: **Legislative** **Interpretive** **Procedural**

Agency: Bureau for Public Health
Department of Health and Human Resources

Address: Building 3, Capitol Complex
Charleston, WV 25305

1. Effect of the Proposed Rule	ANNUAL		FISCAL YEAR		
	Increase	Decrease	Current	Next	Thereafter
Estimated Total Cost	\$	\$	\$ 100,720	\$ 132,370	\$ 129,870
Personal Services			90,520	117,270	117,270
Current Expense			7,700	10,100	10,100
Repairs & Alterations					
Equipment			2,500	5,000	2,500
Other					
Revenue					

2. Explanation of above estimates. Information is for increased costs of the proposed regulation.

Personal Services

1.0 FTE for Office Assistant II	18,000	
Administrative Fee @ 215	215	
FICA, Retirement and Workers Comp (21.88%)	3,939	
Health Insurance @ 4596/FTE	<u>4,596</u>	
Total	26,750	\$26,750

Current Expense

Office Supplies	800	
Telephone	400	
Rent 100 sq ft @ \$12.00/sq ft	<u>1,200</u>	
Total	2,400	\$ 2,400

Equipment

Computer Equipment @\$2500	<u>2500</u>	
Total	2500	\$ 2,500
		Total \$31,650

3. Objectives of this rule:

To require 12 continuing educational hours every two years for Class I operators (24 hours for Class II and higher) to meet renewal requirements for public water supply operators. Establishing continuing education for water treatment plant operators is a requirement of the federal Safe Drinking Water Act. The Act requires states to require public water supply operators obtain continuing educational instruction to maintain currency with new federal regulations. States were required to enact regulations prior to February 05, 2001, to maintain state primacy for the public water supply supervision program and avoid mandatory reductions of the EPA Drinking Water Treatment Revolving Fund capitalization grants made to the state to finance drinking water treatment infrastructure projects. The proposed rule incorporates minor revisions to include language (grandfathering clauses) inadvertently omitted in the legislative rule drafting process during the 2001 session.

4. Explanation of Overall Economic Impact of Proposed Rule.

A. Economic Impact on State Government.

Direct increased cost to the state is \$31,650 in the first year with ongoing incremental costs to the state of approximately \$29,150. These costs reflect the increased costs for certification upgrades for the approximately 500 Class ID operators that will be required to upgrade to Class I certification along with the record keeping for the biannual continuing training requirements.

B. Economic Impact on Political Subdivisions; Specific Industries; Specific Groups of Citizens.

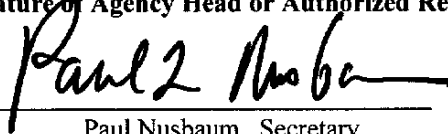
The proposed amendments to the rules approved during the 2001 legislative session will not add any direct costs to those entities regulated. They will probably reduce costs to the smaller public water systems as the amendments will allow present operators to upgrade their certification level which will negate recruitment of higher class operators at increased costs.

C. Economic Impact on Citizens/Public at Large.

The amendments will not increase costs to the public. Grand fathering existing operators will actually save monies as public water systems will not have to recruit higher class operators which usually demand higher salaries.

Date: July 27, 2001

Signature of Agency Head or Authorized Representative:



Paul Nusbaum, Secretary
Department of Health and Human Resources

QUESTIONNAIRE

(Please include a copy of this form with each filing of your rule: Notice of Public Hearing or Comment Period, Proposed Rule, and if needed, Emergency and Modified Rule.)

DATE: July 27, 2001

TO: LEGISLATIVE RULE-MAKING REVIEW COMMITTEE

FROM: (Agency name, Address & Phone No.) Bureau for Public Health

Department of Health and Human Resources

State Capitol Comple, Building 3, Room 201; Charleston, WV 25305

Telephone: (304) 558-5598

LEGISLATIVE RULE TITLE: Public Water Systems Operator Regulations

1. Authorizing statute(s) citation: WV Code Sections 16-1-4 and 16-1-9

2. a. Date filed in State Register with Notice of Hearing or Public Comment Period:
June 11, 2001

b. What other notice, including advertising, did you give of the hearing?
Notice of the proposed rule was advertised in newspapers of general circulation and notifications were sent to industry associations including the WV Rural Water Association and WV Section of the American Water Works Association

c. Date of Public Hearing(s) or Public Comment Period ended:
July 11, 2001

d. Attach list of persons who appeared at hearing, comments received, amendments, reasons for amendments.
Attached _____ No comments received X

- e. Date you filed in State Register the agency approved proposed Legislative Rule following public hearing (be exact):

July 27, 2001

- f. Name, title, address and phone/fax/e-mail numbers of agency person(s) to receive all written correspondence regarding this rule (please type):

Martha Barnitt

Office of Regulatory Support - DHHR

Bldg. 3, Room 201, Capitol Complex

Charleston, West Virginia 25305

Tel: 558-5598

- g. IF DIFFERENT FROM ITEM 'f', please give Name, title, address and phone number(s) of agency person(s) who wrote and/or has responsibility for the contents of this rule (please type):

Vic Wilford, Director

Environmental Engineering Division - DHHR

815 Quarrier Street, Suite 418

Charleston, West Virginia 25305

Tel: 558-2981

3. If the statute under which you promulgated the submitted rules requires certain findings and determinations to be made as a condition precedent to their promulgation:

- a. Give the date upon which you filed in the State Register a notice of the time and place a hearing for the taking of evidence and a general description of the issues to be decided.

N/A

- b. Date of hearing or comment period:

N/A

c. On what date did you file in the State Register the findings and determinations required together with the reasons therefore?

N/A

d. Attach findings and determinations and reasons:

Attached N/A

TITLE 64
LEGISLATIVE RULES
DIVISION OF HEALTH

FILED

2001 JUL 27 P 2: 24

SERIES 4
PUBLIC WATER SYSTEMS OPERATOR REGULATIONS

OFFICE WEST VIRGINIA
SECRETARY OF STATE

§64-4-1. General.

1.1. Scope. -- This legislative rule governs the examination and certification of operators of public water systems.

1.2. Authority. -- W.Va. Code §16-1-4 and related §16-1-9.

1.3. Filing Date. -- ~~May 2, 2001.~~

1.4. Effective Date. -- ~~July 1, 2001.~~

1.5. Repeal of former rule. -- This legislative rule repeals and replaces Department of Health rule, "Public Water Supply Operator Regulations," 64CSR4, filed ~~June 27, 1989~~ May 2, 2001 and effective July 1, ~~1989~~ 2001.

§64-4-2. Application and Enforcement.

2.1. Application. -- This rule applies to owners, operators, and operators-in-training (OITs) of a public water system and to applicants for operator, OIT or fluoride certification.

2.2. Enforcement. -- This rule is enforced by the Commissioner of the Bureau for Public Health¹ or his or her designee.

§64-4-3. Definitions.

3.1. Certified Operator. -- An individual holding a West Virginia public water system operator certification.

3.2. Chief Operator. -- A certified operator designated by the owner to supervise

¹The Department of Health and Human Resources (DHHR) was created by the Legislature's reorganization of the executive branch of State government in 1989. The Department of Health was renamed the Division of Health and made a part of the DHHR (W. Va. Code § 5F-1-1 et seq.). Administratively within the DHHR the Bureau for Public Health through its Commissioner carries out the public health function of the Division of Health.

the operation of a public water system.

3.3. Commissioner. -- Commissioner of the West Virginia Bureau for Public Health or his or her designee.

3.4. Community Water System. -- A public water system that serves at least fifteen (15) service connections used by year round residents or regularly serves at least twenty-five (25) year round residents.

3.5. Continuing Education Hours (CEH). -- Sixty-minute hours of participation in an organized continuing education experience under responsible sponsorship approved by the Commissioner for renewal of a public water system operator certification.

3.6. Continuing Education Unit. -- Ten (10) CEH.

3.7. Drinking Water. -- Water produced by a public water system that conforms to the requirements of the Division of Health rule, "Public Water Systems," 64CSR3.

3.8. Experience. -- Hands-on work performing operator or OIT duties at a public water system but not including hours worked that are limited to waste water treatment, water plant maintenance, labor, and other non-operating or non-distribution duties.

3.9. Fluoride Certification. -- A document issued by the Commissioner granting an individual permission to operate fluoride treatment in a public water system.

3.10. Full-time. -- Thirty-five (35) or more hours per week, but if the public water system is in operation less than thirty-five (35) hours per week, the maximum number of hours of operation per week.

3.11. MGD. -- A million gallons per day.

3.12. Non-Transient Non-Community Water System. -- A public water system that is not a community water system and that regularly serves at least twenty-five (25) of the same persons over six (6) months per year.

3.13. Operate. -- To perform the practical work and apply the technical knowledge and skill in the treatment, testing and distribution of drinking water.

3.14. Operator-in-Training (OIT). -- An individual who holds a valid operator-in-training certificate issued by the Commissioner, and who is training under the supervision of the chief operator at a public water system while completing the educational or experience requirements to become a certified operator.

3.15. Owner. -- The person that governs a public water system.

3.16. Person. -- Individual, partnership, association, syndicate, company, firm, trust, corporation, government corporation, institution, department, division, bureau, agency, federal agency or any other entity recognized by law.

3.17. Public Water System. --

3.17.a. A water supply or water system that regularly supplies water to the public for human consumption through pipes or other constructed conveyances and serves an average of twenty-five (25) or more individuals per day for sixty (60) or more days per year or has fifteen (15) or more service connections and includes:

3.17.a.1. Collection, treatment, storage, or distribution facilities under the control of the owner that are used primarily in connection with the water system; and

3.17.a.2. Collection or pretreatment storage facilities not under the control of the owner that are used primarily in connection with the water system.

3.18. Public Water System Operator Certification. -- A document issued by the Commissioner granting an individual permission to operate a public water system.

3.19. Water Treatment Plant. -- A facility used to process water for the production of drinking water.

§64-4-4. Classification of Public Water Systems.

4.1. A public water system is classified on the basis of the complexity of water treatment processes according to:

4.1.a. A point rating in Table 64-4A of this rule;

4.1.b. The application of the public water system's point rating to classifications in Table 64-4B of this rule; and

4.1.c. Community and nontransient noncommunity public water systems classified as 1D systems on or before the effective date of this rule will remain classified as 1D systems until July 1, 2004, unless treatment modifications do not require a higher classification.

§64-4-5. Required Personnel and Conditions of Employment.

5.1. The owners of public water systems shall employ:

5.1.a. A chief operator and an adequate number of certified operators to

effectively operate the system; and

5.1.b. The chief operator shall be employed full time unless he or she receives a written exemption from full-time employment by the Commissioner;

5.2. Conditions of Employing Operators.

5.2.a. Public water systems employing OITs may not exceed a one (1) on one (1) ratio with certified operators unless written permission to do otherwise is issued by the Commissioner.

5.2.b. Certified operators employed by a public water system that uses fluoride treatment shall hold fluoride certifications.

5.2.c. A person shall not work in a public water system under the certification of another; only the person whose name appears on the operator certification is certified by that document.

5.3. Required Certification Levels.

5.3.a. Chief Operator. The chief operator's certification level shall be equal to or higher than the class of the employing public water system.

5.3.b. Water Treatment Plants During Water Treatment.

5.3.b.1. In Classes II, III and IV public water systems, a certified operator, with certification equal to or greater than the plant classification, shall be on duty at all times that the plant is operational. Exceptions to this requirement may be granted upon written request to the Commissioner and with the Commissioner's written approval.

5.3.b.2. In Classes III and IV public water systems, the certified operators on duty shall hold certifications no lower than one (1) class below the system class.

5.3.c. Class 1D Public Water Systems and Operators.

5.3.c.1. A Class 1D public water system shall be operated by a certified operator holding a Class 1D or higher certification.

5.3.c.2. Class 1D certified operators may only operate Class 1D public water systems, but may perform Class 1D associated duties of sampling in higher class public water systems.

5.3.d. Distribution System Sampling. Personnel employed by a

community or nontransient noncommunity public water system to collect samples from the distribution system shall hold a Class 4 1D or higher operator certification.

5.4. Display of Certificates.

A public water system shall prominently display in its water treatment plant or office the certifications of its certified operators and certified OITs.

5.5. Requirements Regarding Personnel Changes.

5.5.a. Notice by the Public Water System. The owner of a public water system shall notify the Commissioner of employment status changes of the system's certified operators, OITs and intended certified operators and OITs, including their hiring, discharge, resignation, lay-off, retirement or reassignment. When possible, notification shall be made to the Commissioner in advance but shall in no case be made later than five (5) working days following the change.

5.5.b. Notice by Certified Operators. At least thirty (30) days prior to voluntarily terminating employment with a public water system, a certified operator shall notify the Commissioner in writing of the following:

5.5.b.1. The last date of the certified operator's employment; and

5.5.b.2. The public water system where the certified operator will be employed, if known, and if not known, whether the certified operator intends to continue working in a public water system.

5.5.c. Retesting. The Commissioner may require that a Class II certified operator be retested and pass the Class II certification examination when changing employment from a Class II groundwater source system to a surface source system.

§64-4-6. Certified Operator-In-Training (OIT).

6.1. The OIT certification applies only to persons training to become certified operators.

6.2. The chief operator shall verify and submit to the Commissioner an application for an OIT certification within thirty (30) working days after a person's initial employment as an intended OIT or upon intended change in an employee's duties to include water treatment operations. Experience toward certification as a public water system certified operator may begin on the date the Commissioner issues the OIT certification.

6.3. The chief operator is responsible for the supervision and training of all OITs at the public water system.

6.4. The OIT certification is valid for one (1) year. Persons are considered for one (1) additional year of OIT certification if an application is submitted to the Commissioner thirty (30) days prior to the certification's expiration. OIT re-certification is limited to OITs who have taken the Class I certified operator examination.

§64-4-7. Qualifications for Certification.

7.1. Persons applying for certified operator or OIT certification shall be eighteen (18) years of age or older.

7.2. Certification of a public water system operator is based on education, a passing grade on the applicable certification examination and experience as a certified operator or OIT at a public water system. An applicant shall obtain certification for each Class level in sequence.

7.3. Any operator holding Class 1D certification employed on or before the effective date of this rule by a community or nontransient noncommunity public water system who meets the minimum education requirements or substitutes applicable experience on a year-for-year basis to meet the minimum educational requirements may upgrade to a Class 1 certification by passing the certification examination on or before July 1, 2004.

§64-4-8. Education and Experience Requirements; Substitution.

8.1. The education and experience requirements for the various certifications are listed in Table 64-4C of this rule.

8.2. The number of CEU credited for courses and operating experience is shown in Table 64-4D of this rule.

8.3. Experience Substitution for Education.

An applicant for certification in Classes III and IV may substitute a maximum of up to two (2) years prior experience as a certified operator for the educational requirements on a year for year basis. Experience used as a substitute for the educational requirement cannot simultaneously be used to satisfy the experience requirement.

8.4. Education Substitution for Experience.

An applicant for certification in Classes II, III, and IV may substitute a maximum of three (3) years of education beyond high school on a year for year basis for required experience, not to exceed fifty percent (50%) of the total required experience. Education used as substitution for the experience requirement cannot simultaneously be used to satisfy the education requirement.

§64-4-9. Certification Application and Examination.

9.1. Application.

An applicant for certification as a public water treatment certified operator shall submit an application (Form 102C) to the Commissioner with proof of education and, if requested by the Commissioner, separate proof of work experience.

9.2. Examination.

9.2.a. Schedule and Notice. The Commissioner shall schedule examinations for those applicants who meet the requirements of Table 64-4C of this rule and notify them at least fourteen (14) days before the examination date.

9.2.b. Passing Grade and Re-examination. Seventy percent (70%) is the passing grade for the examination. An applicant who fails an examination shall wait a minimum of sixty (60) days before applying for re-examination. Applicants who fail an examination three (3) times shall wait a minimum of one (1) year between subsequent re-examinations.

9.2.c. Longevity of Examination Results. The results of certification examinations are valid for two (2) years. If the applicant has not met the requirements for certification within those two (2) years, the applicant may reapply for the examination.

§64-4-10. Certification Expiration, Renewal, Re-certification, Suspension and Revocation.

10.1. Expiration.

Certified operator certifications expire two (2) years from the date of issuance.

10.2. Renewal.

10.2.a. Application. At least thirty (30) days before a certification expires, the chief operator shall submit to the Commissioner the applications for the certification renewals of the operators under his or her supervision, but if the chief operator fails to do so, the operators shall submit their certification applications.

10.2.b. CEH. Before the Commissioner grants certification renewal, certified operators, other than Class 1D-certified operators, shall complete required CEH during each two (2) year certification period. Class 1 operators are required to complete twelve (12) continuing education hours and Class 1 and higher classifications must complete twenty-four (24) continuing education hours. The CEH

may include classroom, seminar, or workshop training that is directly related to the treatment, monitoring, or distribution of drinking water that has been approved by the Commissioner. Operators may not carry over additional CEH completed during the two (2) year period to satisfy the CEH requirement for the next certification renewal period.

10.3. Re-certification.

A formerly certified operator seeking re-certification at his or her last certification level shall, if one or more of the following conditions exist, pass a certification examination at his or her last certification level if he or she:

10.3.a. Has not obtained re-certification within one (1) year after the certification expiration date;

10.3.b. Has not been actively engaged in public water system operations for a two (2) year period; or

10.3.c. Has inadequately performed his or her certified operator's duties.

10.4. Certification Suspension and Revocation.

10.4.a. The Commissioner may suspend or revoke the certification of an operator if:

10.4.a.1. The certified operator obtains certification fraudulently or assists or encourages another to do so;

10.4.a.2. The certified operator is shown to be guilty of neglect of duties, incompetency, misconduct or non-compliance with this rule or the Division of Health rule "Public Water Systems," 64CSR3;

10.4.a.3. The certified operator fails to notify the Commissioner of voluntary termination of employment in accordance with Subdivision 5.5.b of this rule, even though the failure shall not subject the certified operator to the penalties of Section 13 of this rule; or

10.4.a.4. The certified operator is involuntarily terminated by a public water system. The reason for the termination may also subject the certified operator to the penalties of Section 13 of this rule.

10.4.b. Upon review of written documentation, the Commissioner may reinstate a suspended or revoked certification when justice would be served and public water system operation or public health would not be jeopardized.

§64-4-11. Certification from Another Jurisdiction.

11.1. The Commissioner may grant certification to a public water system operator certified by another jurisdiction, if:

11.1.a. The applicant meets the educational and work experience requirements of this rule; and

11.1.b. The applicant passes a West Virginia certification examination.

11.2. For information to be evaluated, the applicant shall provide to the Commissioner written verification of previous educational and work experience including program training, classroom contact hours, and certificates of completion before the Commissioner will consider the information.

§64-4-12. Compliance and Penalties.

12.1. A person subject to the provisions of this rule shall comply fully with them and shall not direct or assist another person to violate this rule.

12.2. A person who violates any provision of this rule or any rules or orders of the Division of Health is guilty of a misdemeanor and shall, upon conviction, be punished by a fine of not more than ~~two~~ five hundred dollars (~~\$200~~) (\$500) or by imprisonment for not more than ~~thirty (30) days~~, or both, as provided under W.Va. Code §16-1-18. Each day's failure to comply with a provision of this rule may be a separate offense.

§64-4-13. Administrative Due Process.

Those persons adversely affected by the enforcement of this rule may request a contested case hearing in accordance with the Division of Health rule, "Rules and Procedures for Contested Case Hearings and Declaratory Rulings," 64CSR1.

TABLE 64-4A

POINT RATING SYSTEM FOR CLASSIFICATION OF PUBLIC WATER SYSTEMS

NOTE: If a process is used for more than one function, the points count only once according to the primary function.

	Points
Population	1 point per 1000 (or part thereof), maximum 20 points
Design Flow	1 point/MGD (or part thereof), maximum 20 points
Source	
Groundwater	3
Groundwater Under the Direct Influence of Surface Water	5
Surface Water	8
Purchased	1
Treatment	
A. Fe/Mn Removal	
Greensand with $KMnO_4$	6
Oxidation/Filtration	5
Oxidation/Sedimentation	2
Sequestration	2
pH Adjustment	2
Flocculation/Sedimentation	4
B. Softening	
Ion Exchange	3
Lime Soda	
Presedimentation	2
Chemical Coagulant/Add	5
Mixing/Sedimentation/ Flocculation	4
with Upflow Clarification	6
Recarbonation	3
Filtration	4
C. Surface Water Treatment	
Presedimentation	2

Chemical Addition	5
Mixing/Flocculation /Sedimentation	4
with Upflow Clarification (sludge blanket)	6
Filtration	5
Diatomaceous Earth Filtration	6
Potassium Permanganate	3
Powdered Activated Carbon	2
Disinfection Process	
Gaseous Chlorination	5
Hypochlorination	3
Ozonation	5
Chlorine Dioxide	5
Chloramine	3
Corrosion Control	
pH Adjustment	2
Inhibitor Addition	2
Aeration	2
Fluoridation	
Hydrofluorosilicic Acid	6
Sodium Fluoride or Sodium Fluorosilicate	4
Sludge/Backwash Water	
Lagoon	2
Flocculent Addition/Filter press	4
Recirculation of Backwash Water	2
Advanced Treatment Technique	
Reverse Osmosis	5
Ultrafiltration	5
Ion Exchange	5
<u>Other (air stripping, carbon contactor, etc.)</u>	<u>5</u>
Lab Control	
Groundwater Disinfection	2
Groundwater Fe/ Removal	3
Surface Water Under Direct Influence	3
Surface Water ≤ 3.0 MGD (direct)	4
Surface Water $>3.0 \leq 10$ MGD (design)	6
Surface Water >10 MGD (design)	8
Bacteriological Laboratory	4

TABLE 64-4B

CLASSIFICATION OF PUBLIC WATER SYSTEMS

Class	1D	I	II	III	IV
Points	1-17	18-35	36-55	56-75	76

- NOTES:
1. Regardless of point rating, a community or non-transient non community public water system is, at a minimum, a Class I public water system.
 2. Regardless of point rating, a public water system with a surface water source (including groundwater under the direct influence of surface water) is, at a minimum, a Class II public water system.

Table 64-4C

OPERATOR EDUCATION AND EXPERIENCE REQUIREMENTS FOR CERTIFICATION

CLASS	EDUCATION REQUIRED	EXPERIENCE REQUIRED
1D	Eighth Grade.	Attendance at a one (1) day course administered by the Bureau for Public Health.
I	High School diploma or GED.	One (1) year at a Class 1D or higher public water system.
II	High School diploma or GED plus attendance at an approved Class II course and passing the course test.	Three (3) years at a Class 1D or higher public water system with at least one (1) of those years in a Class I public water system.*
III	Two (2) years of college; or a high school diploma or GED and ninety (90) CEU.	Five (5) years at a Class I or higher public water system with at least one (1) of those years at a Class II or higher public water system.*
IV	Four (4) years of college; or a high school diploma or GED and one hundred eighty (180) CEU.	Six (6) years at a Class I or higher public water system with at least one (1) of those years at a Class III or higher public water system.*

* Experience obtained exclusively in distribution shall not count for more than thirty percent (30%) of the total experience required for Class II through IV certification. Less than full-time experience shall be counted proportionately as full-time equivalent experience.

TABLE 64-4D**CEUs FOR COURSES AND OPERATING EXPERIENCE**

10 Classroom Hours With an Instructor	1 CEU (Continuing Education Units)
1 College Semester Credit Hour*	1.5 CEUs
1 Year of College (30 Semester Credit Hours*)	45 CEUs
1 Year of College (45 Quarter Credit Hours*)	45 CEUs
1 Public Water Supply Operators Short Course sponsored by the Commissioner [No credit issued for repeating course.]	4 CEUs
1 Public Water Supply Operators Seminar sponsored by the Commissioner	1 CEU
Courses directly related to the field of water treatment/distribution**	1 CEU for each 10 classroom hours with an instructor
Courses not specifically related to water treatment/distribution	0.5 CEU for each 10 classroom hours with an instructor
1 Year of Experience	45 CEUs
1 Month of Experience	3.75 CEUs

*Courses completed in the fields of engineering, chemistry, water/wastewater technology or allied sciences.

** The Commissioner may evaluate courses from correspondence schools, trade schools, community colleges, formalized workshops, and seminars directly related to water treatment and distribution to determine the CEUs allowed.