

Public Water Systems Operator Regulations

Statement of Circumstances for the Proposed Rule

Public Water Systems Operator Regulations govern the educational and experience requirements for certification of operators for public water systems in the state. The state of West Virginia has had operator certification requirements for more than 65 years. The proposed regulation revision requires that operators receive a minimum of 24 hours of continuing education/professional development every two years as a prerequisite for continued certification. All states are mandated by EPA to require continuing education of water plant operators. The requirement is a condition for continued federal Safe Drinking Water Act grant funding to the state for the public water systems surveillance program as well as the drinking water treatment revolving fund. Together the funding amounts to over \$8 million annually.

Public Water Systems Operator Regulations

Brief Summary of the Proposed Rule

The proposed rule has been revised to now require twenty-four hours of continuing education contact hours every two years for operator certification renewal. This change is in response to a requirement of the federal Safe Drinking Water Act that mandates that states adopt the requirements in order to maintain eligibility for full funding of capitalization grants of the drinking water treatment revolving fund. Failure to adopt regulations will result in a 20% withholding, or approximately \$1.5 million.

Additional changes include the clarification of allowances credited for education and experience for certification.

FISCAL NOTE FOR PROPOSED RULES

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

Type of Rule: Legislative Interpretive Procedural

Agency: Division of Health
Department of Health and Human Resources

Address: Building 3, Capitol Complex
Charleston, W. Va. 25305

1. Effect of the Proposed Rule	ANNUAL		FISCAL YEAR		
	Increase	Decrease	Current	Next	Thereafter
Estimated Total Cost	\$	\$	\$ 103,020	\$ 134,670	\$ 134,670
Personal Services			90,520	117,270	117,270
Current Expense			7,700	12,400	12,400
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/PTE	4,596

Current Expense

Office Supplies	800
Telephone	400
Rent 100 sq ft @ \$12.00/sq ft	1,200

Equipment

Computer Equipment @\$2500	2500
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3. Objectives of this rule:

To require 24 continuing educational hours every two years 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 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. Failure to implement regulations affect state primacy for the public water supply supervision program and a 20% withholding of the Drinking Water Treatment Revolving Fund capitalization grants amounting to \$1.5 million.

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

Any individual who owns and operates a public water supply is mandated to have a certified public water supply operator who must complete continuing educational hours to maintain certification. The state and non profit associations (WV Rural Water Association, American Water Works Association, Expo and others) sponsor numerous free training seminars for operators that will meet the requirements of the regulations.

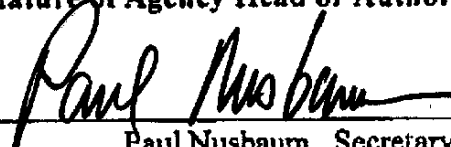
C. Economic Impact on Citizens/Public at Large.

Costs for operating public water supplies will be passed on to the consumer in the form of higher rates and/or prices for commercial establishments. The cost increase that will be passed on is anticipated to be minimal to the citizen.

June 11, 2001

Date: _____

Signature of Agency Head or Authorized Representative:



Paul Nusbaum, Secretary
Department of Health and Human Resources

TITLE 64
LEGISLATIVE RULES
DIVISION OF HEALTH

FILED

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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 and effective July 1, 1989.

§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.

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.

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

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~~ II 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 hundred dollars (\$200) 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.