



**TITLE 64**  
**LEGISLATIVE RULES**  
**~~DIVISION OF HEALTH~~ BUREAU FOR PUBLIC HEALTH**

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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. The W. Va. Code is available in public libraries and on the Legislature's web page, <http://www.legis.state.wv.us/>.

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 Health 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 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. -- An 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 public water system is any water supply or system that regularly supplies or offers to supply water for human consumption through pipes or other constructed conveyances, if serving at least an average of twenty-five individuals per day for at least sixty days per year, or which has at least fifteen service connections, and shall include: (1) Any collection, treatment, storage, and distribution facilities under the control of the owner or operator of the system and used primarily in connection with the system; and (2) Any collection or pretreatment storage facilities not under such control which are used primarily in connection with the system. A public water system does not include a system which meets all of the following conditions: (1) Which consists only of distribution and storage facilities (and does not have any collection and treatment facilities); (2) Which obtains all of its water from, but is not owned or operated by a public water system that otherwise meets the definition; (3) Which does not sell water to any person; and (4) Which is not a carrier conveying passengers in interstate commerce.

~~3.17.a. A water supply or water system for the provision to the public of that regularly supplies water to the public for human consumption through pipes or other constructed conveyances if the system has at least 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 or regularly serves at least twenty-five (25) individuals. The term and includes:~~

~~3.17.a.1. Any collection, treatment, storage, or distribution facilities not under the control of the owner operator of the system that are and used primarily in connection with the water system; and~~

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

~~3.17.b. A public water system does not include a system which meets all of the following conditions:~~

~~3.17.b.1. Which consists only of distribution and storage facilities (and does not have any collection and treatment facilities);~~

~~3.17.b.2. Which obtains all of its water from, but is not owned or operated by a public water system to which otherwise meets the definition these regulations apply;~~

~~3.17.b.3. Which does not sell water to any person; and~~

~~3.17.b.4. Which is not a carrier that conveys conveying passengers in interstate commerce.~~

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

4.2. 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 from 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, unless the Commissioner grants a written exception to this requirement in response to a written request for one. ~~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 ± 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. The Commissioner shall consider a person ~~Persons are considered~~ for one (1) additional year of OIT certification if he or she submits 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 are listed as follows:

8.1.a. For the various certifications, the requirements are in Table 64-4C of this rule.

8.1.b. For the number of CEUs credited for courses and operating experience, the allowances are in Table 64-4D of this rule.

8.2. Experience substitution for education is as follows:

8.2.a. 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; and

8.2.b. An applicant using experience as a substitute for the educational requirement cannot simultaneously use that same experience to satisfy the experience requirement.

8.3. Education substitution for experience is as follows:

8.3.a. 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; and

8.3.b. An applicant using education as a substitution for the experience requirement cannot simultaneously use that education 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~~ 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.

**§64-44-13. 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 <sub>4</sub>                        | 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 ≤ 10 MGD (design)                 | 6        |

Surface Water >10 MGD (design)

8

Bacteriological Laboratory

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**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**

| <b>CLASS</b> | <b>EDUCATION REQUIRED</b>  | <b>EXPERIENCE REQUIRED</b>   |
|--------------|--|--|
| 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.