

WEST VIRGINIA DEPARTMENT OF HEALTH  
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FILED IN THE OFFICE OF  
A. JAMES MANCHIN  
SECRETARY OF STATE

THIS DATE 4/8/83  
Administrative Law Division



L. Clark Hansbarger, M.D.  
Director of Health

Entered

WEST VIRGINIA LEGISLATIVE RULES  
BOARD OF HEALTH

Public Water Supply Operator Regulations

Chapter 16-1  
Series 4  
(1983)

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WEST VIRGINIA LEGISLATIVE RULES  
BOARD OF HEALTH

Chapter 16-1  
Series 4  
(1983)

Subject: Public Water Supply Operator Regulations

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Section 1. General

1.1. Scope - These legislative rules establish the rules and regulations of the West Virginia State Board of Health governing the examination and certification of operators of Public Water Supplies.

1.2. Authority - These legislative rules are issued under the authority of and related to Chapter 16, Article 1, Section 7(2) of the West Virginia Code, of 1931, as amended.

1.3. Filing Date - These legislative rules were promulgated on the 20th day of November, 1981; and were filed on the 8th day of April, 1983, in the Secretary of State's Office.

1.04. Effective Date - These legislative rules became effective on the 9th day of May, 1983.

Section 2. Application and Enforcement

2.1. Application - These legislative rules apply to all persons who own and operate a public water supply system.

2.2. Enforcement - Enforcement of these legislative rules is vested with the director of the West Virginia department of health or his lawful designee.

Section 3. Supersession or Repeal of Former Regulations

These legislative rules supersede and repeal the West Virginia Board of Health Regulations Chapter 1, Article 5A "Public Water Supply Operator Regulations" 1974.

Section 4. Definitions - The following definitions shall apply in the interpretation and enforcement of these regulations.

4.1. Certified Operator - An individual holding a Public Water Supply Operator Certificate issued by the director.

4.2. Chief Operator - The Certified Operator designated by the owner to supervise the operation of a public water system's treatment plant.

4.3. Continuing Education Unit - Ten contact hours of participation in an organized continuing education experience under responsible sponsorship and approved by the director. (re: Section 9.02)

4.4. Drinking Water - Water free from biological, chemical, physical and radiological contaminants which cause disease or harmful physiological effects. Minimum quality of the water shall conform to these applicable regulations and standards of the board of health.

4.5. Director - Director of the West Virginia department of health or his designee.

4.6. 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.

4.7. Public Water Supply Operator Certificate - A written document issued by the director giving a designated individual permission to operate a public water supply.

4.8. Public Water Supply/System - Any water supply/system which regularly supplies or offers to supply, piped water to the public for human consumption, 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, or distribution facilities under the control of the owner of such system and used primarily in connection with such system, and (2) Any collection or pretreatment storage facilities not under such control which are used primarily in connection with such system.

4.9. Operate - To perform the practical work and the application of the technical knowledge and skill to treat, test and distribute drinking water.

4.10. Operator-in-Training (OIT) - An individual undergoing on-the-job training at a public water system and in the process of completing the educational or experience requirements to become a Certified Operator.

4.11. Owner - The person responsible for providing drinking water to the public.

4.12. Water Treatment Plant - Facilities provided for the treatment of water by any one or any combination of the controlled processes of coagulation, sedimentation, absorption, filtration, disinfection or other processes which produce drinking water consistently meeting the requirements of the board of health.

#### Section 5. Classification of Public Water Systems

5.1. A public water system shall be classified on the basis of complexity of water treatment processes and the total population served.

5.1.1. The system of classification for Public Water Systems shall be based on a total point rating as computed by the point system classification shown in subsection 5.1.2 and subsequently applied to subsection 5.1.3 of these regulations.

5.1.2. Point system for classification of Public Water Systems shall be based on the following table:

POINT SYSTEM FOR CLASSIFICATION OF PUBLIC WATER SYSTEMS

Assign points for every item that applies:

| <u>Item</u>   | <u>Points</u>               |                |
|---|-----------------------------|----------------|
| <u>Size</u>   |                             |                |
| Maximum population served, peak day . . . .   | 1 pt. per 10,000<br>or part | _____ (Max 10) |
| Design flow (avg. day) or<br>peak month's<br>production (avg. day), whichever is<br>larger . . . . .                    | 1 pt. per MGD<br>or part    | _____ (Max 10) |
| <u>Water Supply Source</u> . . . . .  | 1 pt. per source            | _____          |
| Groundwater . . . . .   | 3                           | _____          |
| Surface water . . . . .   | 10                          | _____          |
| Average raw water quality (good to poor). .   | 0-10                        | _____          |
| <u>Treatment</u> (Note: Most plants will fit into <u>only</u><br>one of the four treatment categories<br><u>below</u> ) |                             |                |
| <u>Iron or Iron/Mn Removal</u> (nominal 10)   |                             |                |
| Chemical oxidation by $KNO_4$ . . . . .   | 6                           | _____          |
| Chemical oxidation by Cl. . . . .   | 5                           | _____          |
| Aeration. . . . .   | 4                           | _____          |
| Filtration. . . . .   | 6                           | _____          |
| <u>Ion Exchange Softening</u> (nominal 10)  |                             |                |
| Ion exchange softening. . . . .   | 5-10                        | _____          |
| <u>Coag., Sed., Filtr'n.</u> (w/o softening) (nominal 15)   |                             |                |
| Presetting . . . . .  | 2                           | _____          |
| Addition of coagulants. . . . .   | 4                           | _____          |
| Mixing, flocculation, setting,. . . . .   | 5                           | _____          |
| OR upflow solids contact . . . . .  | 8                           | _____          |
| Filtration. . . . .   | 6                           | _____          |

| <u>Item</u>  | <u>Points</u> |       |
|--|---------------|-------|
| <u>Size</u>  |               |       |
| <u>Coag., Sed., Filtr'n with Softening (nominal 20)</u>  |               |       |
| Presettling . . . . .  | 2             | _____ |
| Addition of chemicals/coagulants. . . . .  | 6             | _____ |
| Mixing, flocculation, settling, . . . . .  | 5             | _____ |
| OR upflow solids contact . . . . .   | 8             | _____ |
| Recarbonation . . . . .  | 3             | _____ |
| Filtration. . . . .  | 6             | _____ |
| <br><u>Adjustment</u> (Note: Assign points here only for treatment<br><u>in addition to those listed above, or</u><br><u>where it is the only treatment provided).</u> |               |       |
| Chemical addition for stabilization<br>(polyphosphate, soda, lime, pH<br>adjustment, etc.). . . . .  | 4             | _____ |
| Taste and odor or color control<br>(KMnO <sub>4</sub> , activated carbon, etc.) . . . . .  | 8             | _____ |
| <u>In-Plant Treatment of Plant Sludge.</u> . . . . .   | 6             | _____ |
| <u>Advanced Treatment (Demineralization)</u> . . . . .   | 15            | _____ |
| <u>Fluoridation.</u> . . . . .   | 5             | _____ |
| <u>Disinfection.</u> . . . . .   | 5             | _____ |
| Chlorination or comparable. . . . .  | 5             | _____ |
| On-site generation of disinfectant. . . . .  | 5             | _____ |
| <br><u>Laboratory Control by Plant Personnel</u>   |               |       |
| Bacteriological (complexity). . . . .  | 0-10          | _____ |
| Chemical/physical (complexity). . . . .  | 0-10          | _____ |
| TOTAL . . . . .  |               | _____ |

5.1.3. Classification of Public Water Systems shall be based on the following table:

CLASSIFICATION OF PUBLIC WATER SYSTEMS

| BASIS OF CLASSIFICATION         | CLASSES <sup>(1)</sup> |            |               |                 |                    |
|---------------------------------|------------------------|------------|---------------|-----------------|--------------------|
|                                 | ID                     | I          | II            | III             | IV                 |
| WATER SYSTEM TOTAL POINT RATING | 1-20                   | 21-30      | 31-55         | 56-75           | 76 - GREATER       |
| POPULATION SERVED               | 500 and LESS           | 501 - 1500 | 1501 - 15,000 | 15,001 - 50,000 | 50,001 and GREATER |

(1) In cases where the total point rating and population served differ, the higher classification shall be used.

Section 6. Requirements for Certified Public Water Systems Operators

6.1. Any person operating a public water system in the State of West Virginia shall be a Certified Operator or an Operator-in-Training (OIT), under the supervision of a Certified Operator.

6.2. The owner of a public water system shall obtain the services of a Chief Operator and an adequate number of Certified Operators to effectively operate the system. The use of Operators-in-Training to assist in the operation of the system is permitted by these regulations, but, only with written permission of the director may the ratio of OIT's to Certified Operators exceed 1 to 1.

6.3. The required certification level for any Chief Operator shall be determined by use of the following table.

PUBLIC WATER SYSTEM CHIEF OPERATOR CLASSIFICATION TABLE

| <u>PUBLIC WATER SYSTEM CLASSIFICATION</u> | <u>MINIMUM CERTIFICATION REQUIREMENTS FOR CHIEF OPERATORS</u> |
|---|---|
| CLASS ID                                  | CLASS ID or HIGHER  |
| CLASS I                                   | CLASS I or HIGHER   |
| CLASS II                                  | CLASS II or HIGHER  |
| CLASS III                                 | CLASS III or HIGHER   |
| CLASS IV                                  | CLASS IV  |

6.4. Classes I, II, III, and IV water systems shall have a Certified Operator present at the treatment facilities anytime water is undergoing treatment. Exceptions to this requirement may be granted to Classes I and II systems based on the director's evaluation of the system's source of raw water and the required treatment processes. All exceptions granted shall be issued in writing to the owner by the director.

6.5. Class ID certified operators shall be restricted to operating the specific public water system or systems designated on their certificates.

6.6. The Certificates of all Certified Operators and Operators-in-Training shall be prominently displayed at that system's water treatment plant.

Section 7. Operator-In-Training (OIT)

7.1. The Operator-in-Training class is limited to persons undergoing on-the-job training to become a Certified Operator.

7.2. A written application for an Operator-in-Training certificate shall be made in writing to the director, within thirty (30) days after employment as an Operator-in-Training at a Public Water System.

7.3. The Chief Operator shall be responsible for the supervision and training of all Operator's-in-Training utilized by the Public Water System.

7.4. Operator-in-Training certification shall be valid for one year. Persons will be considered for one additional year of certification if a written application for same is submitted to the director, (30) days prior to current certificate expiration. Recertification shall be limited to those persons who can document to the director an effort to obtain Certified Operator status.

Section 8. Qualifications for Certification

8.1. Applicants applying for Certified Operator or OIT status shall be a minimum of eighteen years of age.

8.2. Certification of public water system operators shall be based upon education, experience and satisfactory completion of an examination given by the director. Certification at Class I, II, III, and IV levels shall be attained in sequence. Minimum education and experience requirements are as follows:

| <u>CLASS</u> | <u>EDUCATION REQUIRED</u> | <u>EXPERIENCE REQUIRED</u>  |
|--------------|---------------------------|---|
| ID           | Eighth Grade              | 3 months at Class ID water treatment plant or higher  |
| I            | High School               | 1 year at Class ID water treatment plant or higher  |
| II           | High School               | 3 years at Class ID water treatment plant or higher with a minimum of 1 year at Class I water treatment plant or higher |
| III          | High School and 90 CEU's  | 5 years at Class I water treatment plant or higher with a minimum of 1 year at Class II water treatment plant or higher |

| <u>CLASS</u> | <u>EDUCATION REQUIRED</u>    | <u>EXPERIENCE REQUIRED</u>   |
|--------------|------------------------------|--|
| IV           | High School and<br>180 CEU's | 6 years at Class I<br>water treatment plant<br>or higher with a<br>minimum of 1<br>year at Class III<br>water treatment plant<br>or higher |

8.2.1. Operating experience for Class ID operators may be waived for those individuals who attend a specialized training course approved by the director.

Section 9. Education/Experience Credits and Substitution

9.1. High School education means the successful completion of high school documented by a diploma issued by the school attended. A General Education Diploma (GED) shall be accepted as equivalent to a high school education.

9.2. Education beyond high school shall be expressed as Continuing Education Units (CEU's), see Definition 4.3. The CEU substitution values are as follows:

| <u>EDUCATION</u>   | <u>CEU's</u> |
|--|--------------|
| 1 Public Water Supply Operator's Short Course (Sponsored by the director - Credit not allowed for repeating same course) | 4.0          |
| 1 Public Water Supply Operators Seminar (Sponsored by the Director)  | 1.0          |
| 1 Quarter Hour College Credit  | 1.0          |
| 1 Semester Hour College Credit   | 1.5          |
| 1 Month Operating Experience (Acceptable to the Director)  | 3.75         |

9.3. Certified Operator experience, at the next certification level below that being applied for, may be substituted on a year for year basis for education requirement beyond the high school level through a maximum of 90 CEU's. However, any experience used as a substitute for the educational requirement cannot also be used to satisfy the experience requirement.

9.4. Education, above the high school level, may be substituted on a year for year basis for experience requirements in Class II, III and IV only. A maximum of three years of education may be substituted for experience requirements.

Section 10. Application for Certification

10.1. Those persons who desire to be certified shall make a written request for certification to the director. Proof of education shall be submitted along with an application for examination. Written proof of work experience may be required by the director.

10.2. Examinations for certification shall be scheduled by the director for those applicants who meet the requirements of Section 9 of these regulations. The time and place for the examination will be designated by the director, who shall notify the applicants at least fourteen (14) days before the scheduled examination date.

10.3. An applicant's certification status shall be determined by examination grade, educational and experience background. To pass the examination, an applicant must make a minimum grade of 70 percent. 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.

Section 11. Revocation or Expiration of Certificates

11.1. The director may require former certificate holders to take another examination at their last certification classification if they have not been actively engaged in water supply treatment operations for a two-year period.

11.2. A certified operator employed by a public water system shall notify the director at least thirty (30) days prior to terminating his employment. Failure to notify the director shall be cause for automatic certificate revocation. The penalties as stipulated by Section 14 of these regulations shall not apply to an operator who fails to submit said notice, and automatic revocation shall not occur if the operator has been discharged by his employer.

11.3. Public water supply operator certificates issued under the provisions of these regulations shall expire on the date indicated thereon. The period of validity for these certificates shall be not less than two years nor greater than three years. Certificates held prior to the effective date of these regulations reflect a date of issue. Persons holding these certificates have two years after the effective date of these regulations to apply for recertification.

11.4. Operators who desire to be recertified, shall make a written request for recertification to the director.

11.5. The director may revoke the certificate of any person who fraudulently obtains a certificate or for neglect, incompetency or misconduct in the performance of his duties as an operator of a public water system, including non-compliance with Chapter 16-1, Series III of the "Public Water

Supply Regulations" which relates to public water supply control tests, microbiological monitoring and operating records. The director may reinstate any person whose certificate has been revoked upon presentation of satisfactory evidence to the director that all deficiencies leading to the revocation have been corrected.

Section 12. Reciprocity - The director shall consider for West Virginia certification, the holder of a certificate issued by a proper authority of another state upon presentation to the director satisfactory written evidence of the following:

12.1. The applicant has been offered and has agreed to accept full time employment as a public water system operator in the State of West Virginia.

12.2. The applicant has successfully passed a certification examination at least equivalent to that which is required under these regulations.

12.3. The applicant meets the educational and work experience requirements of these regulations for certification.

Section 13. Severability - If any provisions of these regulations or the application thereof to any person or circumstance shall be held invalid, such invalidity thereof shall not affect the provisions or application of these regulations which can be given effect without the invalid provisions or application and, to this end, the provisions of these regulations are declared to be severable.

Section 14. Penalties - Any person who violates any provision of these regulations or any regulations or rules adopted by the West Virginia State Board of Health pursuant to the authority granted by these regulations shall

be guilty of a misdemeanor and shall upon conviction be punished by a fine of not more than \$200.00 or by imprisonment for not more than thirty (30) days, or both, as provided under Chapter 16, Article 1, Section 18 of the Public Health Laws of West Virginia, West Virginia Code. Each day's failure to comply with any applicable provision of these regulations shall constitute a separate offense.

Section 15. Administrative Due Process - Those persons adversely affected by the enforcement of these legislative rules desiring a contested case hearing to determine any rights, duties, interests or privileges shall do so in a manner prescribed in the West Virginia Procedural Rules, Board of Health, Chapter 16-1, Series I, 1981, Rules of Procedure for Contested Case Hearings and Declaratory Rulings. The aforementioned procedural rules are incorporated herein by reference.