

**WEST VIRGINIA**  
**SECRETARY OF STATE**  
KEN HECHLER  
**ADMINISTRATIVE LAW DIVISION**

**FILED**

Jul 8 10 12 AM '94

Form #2

OFFICE OF WEST VIRGINIA  
SECRETARY OF STATE

**NOTICE OF A COMMENT PERIOD ON A PROPOSED RULE**

AGENCY: Division of Health TITLE NUMBER: 64

RULE TYPE: Legislative; CITE AUTHORITY §16-1-7(2)

AMENDMENT TO AN EXISTING RULE: YES X NO     

IF YES, SERIES NUMBER OF RULE BEING AMENDED: 5

TITLE OF RULE BEING AMENDED: Wastewater Treatment Works Operators

IF NO, SERIES NUMBER OF NEW RULE BEING PROPOSED:                     

TITLE OF RULE BEING PROPOSED:   

IN LIEU OF A PUBLIC HEARING, A COMMENT PERIOD HAS BEEN ESTABLISHED DURING WHICH ANY INTERESTED PERSON MAY SEND COMMENTS CONCERNING THESE PROPOSED RULES. THIS COMMENT PERIOD WILL END ON August 8, 1994 AT 4:30 p.m.\*

ONLY WRITTEN COMMENTS WILL BE ACCEPTED AND ARE TO BE MAILED TO THE FOLLOWING ADDRESS. \*Comments received after 4:30 p.m. August 8, 1994 will not be considered.

Regulatory Development  
Dept. of Health & Human Resources  
Room 265, Building 3, Capitol Complex  
Charleston, WV 25305  
ATTN: Kay Howard

THE ISSUES TO BE HEARD SHALL BE LIMITED TO THIS PROPOSED RULE.

William T. Wallace, Jr.  
William T. Wallace, Jr., M.D., M.P.H.  
Commissioner, Bureau of Public Health

ATTACH A **BRIEF** SUMMARY OF YOUR PROPOSAL

6.00

FISCAL NOTE FOR PROPOSED RULES

Rule Title: Wastewater Treatment Works and Operators, 64 CSR 5

Type of Rule:  Legislative  Interpretive  Procedural

Agency Department of Health and Human Resources

Address Building 3, Capitol Complex

Charleston, W. Va. 25305

1. Effect of Proposed Rule

	ANNUAL		FISCAL YEAR		
	Increase	Decrease	Current	Next	Thereafter
Estimated Total Cost	\$	\$	\$ 0	\$ 0	\$ 0
Personal Services					
Current Expense					
Repairs and Alterations					
Equipment					
Other					

2. Explanation of above estimates.

The proposed revisions and amendments will not increase the cost of administration of this rule.

3. Objectives of these rules:

This rule establishes minimum requirements for the examination and certification of wastewater treatment works operators, establishes a system for the classification of wastewater treatment works, and specifies certain responsibilities of wastewater treatment works.

4. Explanation of Overall Economic Impact of Proposed Rule.

A. Economic Impact on State Government.

None.

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

None.

C. Economic Impact on Citizens/Public at Large.

None.

Date July 6, 1994

Signature of Agency Head or Authorized Representative



William T. Wallace, Jr., M.D., M.P.H.  
Commissioner, Bureau of Public Health

RULE ABSTRACT

Title: Wastewater Treatment Works and Operators

CSR Title and Series: 64 CSR 5

Type: Legislative

Agency: Department of Health and Human Resources

Summary: The Department of Health and Human Resources proposes to amend, rewrite and retitle Wastewater Treatment Works Operator, 64 CSR 5. In addition to substantive amendments, the rule has been rewritten to clarify it and to meet current legislative standards.

The substantive amendments clarify the professional qualifications of operators of wastewater treatment works; add continuing training requirements for renewal of Class III and IV certificates; correct inconsistencies with other Department rules; limit reciprocity to states which grant reciprocity to West Virginia; establish an informal conference process; and clarify a number of administrative procedures.

The attached two (2) tables identify substantive amendments and clarifications to the rule, and show the correspondence between the rewritten text and the old rule.

Copies of the old rule are available for review at local health department offices or may be purchased from the Administrative Law Division of the Office of the West Virginia Secretary of State, Building 1, Suite 157K, State Capitol Complex, Charleston, WV 25305, telephone (304) 558-6000. Copies of the proposed rule are available from the Office of Environmental Health Services (see below) or from the Secretary of State.

For further information contact: John Brown, Office of Environmental Health Services, telephone (304) 558-0624, Division of Health, 151 11th Avenue, South Charleston, West Virginia 25303, or the Office of Regulatory Development, telephone (304) 558-3223.

7/6/94

[PROPOSED]  
TITLE 64

WEST VIRGINIA ADMINISTRATIVE RULES  
DIVISION OF HEALTH

WASTEWATER TREATMENT WORKS AND OPERATORS

SERIES 5

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For Public Comment Period  
Closing August 8, 1994

[PROPOSED]  
WEST VIRGINIA ADMINISTRATIVE RULES  
DIVISION OF HEALTH  
WASTEWATER TREATMENT WORKS AND OPERATORS  
64 CSR 5

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[PROPOSED]  
TITLE 64  
WEST VIRGINIA ADMINISTRATIVE RULES  
DIVISION OF HEALTH

SERIES 5  
WASTEWATER TREATMENT WORKS AND OPERATORS

§64-5-1. General.

1.1. Scope -- This rule establishes minimum requirements for the examination and certification of wastewater treatment works operators, establishes a system for the classification of wastewater treatment works, and specifies certain responsibilities of wastewater treatment works.

1.2. Authority -- W. Va. Code §16-1-7(2).

1.3. Filing Date --

1.4. Effective Date --

1.5. Supersession and Repeal of Former Regulations -- This rule repeals and supersedes Waste Water Treatment Works Operator, 64 CSR 5, 1983.

§64-5-2. Application and Enforcement.

2.1. Application - This rule applies to wastewater treatment works and wastewater treatment works operators.

2.2. Enforcement - This rule is enforced by the secretary of the West Virginia department of health and human resources.

§64-5-3. Definitions.

3.1. Chief Operator - The individual who is responsible for the over-all operation of the wastewater treatment works.

3.2. High school education - Completion of twelve (12) school grades or a general education development (GED) certificate.

3.3. Operator - An individual who performs operational or supervisory work functions at a wastewater treatment works.

3.4. Operator-in-Training - An individual who has an operator-in-training certificate.

3.5. Person - Includes individual persons, corporations, societies, associations, partnerships, companies, institutions, or other legal entities, whether public or private.

3.6. Population Equivalent Served - A figure which expresses the hydraulic load factor of the wastewater treated by the wastewater treatment works, based on the concentration or quantity of

waste, in terms of population equivalent served, regardless of the source of the waste (e.g., people, industry, agriculture). The population equivalent served is calculated based on 0.17 pounds of five (5) day biochemical oxygen demand or 0.20 pounds of suspended solids per day; the larger of the two (2) figures is used to determine the population equivalent served by the wastewater treatment works.

3.7. Secretary - Secretary of the West Virginia department of health and human resources or his or her designee.

3.8. Small Wastewater Treatment Works (IS) - Any wastewater treatment works that: 1) serves more than an individual home, excluding home aeration units and septic tank systems; 2) treats a daily flow of wastewater less than five hundred and one (501) population equivalent served; and 3) uses extended aeration, a form of pond treatment system or other technology approved by the secretary for treatment.

3.9. Wastewater - Water containing human, animal or domestic waste.

3.10. Wastewater Treatment Works - A facility for treating and discharging wastewater.

#### **§64-5-4. Classification of Wastewater Treatment Works.**

4.1. The secretary shall assign a point rating to a wastewater treatment works according to the rating system shown in Table 64-5A found at the end of this rule.

4.2. The secretary shall assign a class to a wastewater treatment works according to the classification system shown in Table 64-5B found at the end of this rule.

#### **§64-5-5. Certified Operators Required; Duties of Wastewater Treatment Works and Wastewater Treatment Works Operators.**

5.1. Any individual who operates a Class IS, I, II, III, or IV wastewater treatment works in West Virginia shall be certified by the secretary.

5.2. A wastewater treatment works shall employ an individual as the chief operator to be responsible for the operation of the wastewater treatment works. The chief operator shall work on-site.

5.3. The chief operator of a Class IS wastewater treatment works may be employed on a part-time basis. The chief operator of a Class I, II, III or IV wastewater treatment works shall be a full-time employee, except that the secretary may permit the chief operator of a Class I wastewater treatment works to be employed on a part-time basis, based upon substantial evidence that the facility will operate in accordance with applicable State

laws and regulations.

5.4. The chief operator of a Class IS wastewater treatment works shall have: a Class IS wastewater treatment works operator certificate; a Class I or higher wastewater treatment works certificate and previous experience in an IS extended aeration system; or a Class I or higher wastewater treatment works operator certificate and shall pass the Class IS examination prior to being employed as the chief operator: Provided, however, the secretary may require a Class IS wastewater treatment works to employ an operator certified at a class higher than IS to be responsible for on-site operations. The chief operator of a Class I, II, III or IV wastewater treatment works shall be certified at a level at least equal to the classification of the wastewater treatment works.

5.5. The chief operator of a new wastewater treatment works shall be employed and on-site at the wastewater treatment works when construction is twenty-five percent (25%) complete.

5.6. Individuals with an operator-in-training certificate shall be supervised on-site by an operator with a certificate at a class level equal to or greater than the classification of the wastewater treatment works, except that an operator-in-training at a Class IS wastewater treatment works shall be supervised by a certified wastewater treatment works operator who has a Class IS certificate or meets one (1) of the other criteria for a chief operator of a Class IS wastewater treatment works specified in Section 5.4 of this rule.

5.7. Except for Class IS wastewater treatment works, individuals may operate wastewater treatment works of a class equal to or lower than their wastewater treatment works operator classification without supervision. Individuals may operate a wastewater treatment works of a higher class than their wastewater treatment works classification, but shall be supervised on-site by an operator with a wastewater treatment works operator certificate at least equal to the classification of the wastewater treatment works. Individuals who operate a class IS wastewater treatment works who do not have a Class IS certificate shall be supervised by an operator who has a Class IS certificate or meets one (1) of the other criteria for a chief operator of a Class IS wastewater treatment works specified in Section 5.4 of this rule.

5.8. In addition to any other responsibilities and duties, a wastewater treatment works operator shall:

5.8.1. Comply with the provisions of Sewage System Rules, 64 CSR 9, related to wastewater treatment works control tests and records; and

5.8.2. Notify the secretary at least thirty (30) days in advance of the termination of his or her employment at a wastewater treatment works.

5.9. The certificates of all individuals involved in operating a wastewater treatment works shall be prominently displayed at the wastewater treatment works.

**§64-5-6. Initial Application; Examination; Expiration; Renewal; Reinstatement.**

6.1. An individual desiring initial certification as an operator-in-training shall submit an application for certification to the secretary within one (1) month of employment as an operator-in-training. The application shall be on a form provided by the secretary and shall include documentation of education. If the application is not submitted within one (1) month of the date the applicant began employment, the secretary shall count experience required for the purposes of this rule as beginning on the date of receipt of an appropriately completed application for certification as an operator-in-training.

6.2. Operator-in-training certificates are valid for one (1) year. An individual desiring to be recertified as an operator-in-training shall submit a written application to the secretary thirty (30) days prior to the expiration date of the current certificate on a form supplied by the secretary.

6.3. The secretary shall issue an initial or renewal wastewater treatment works operator-in-training certificate to individuals who are currently working in a wastewater treatment works and who meet the educational requirements of Section 7.1.1 of this rule.

6.4. Individuals desiring certification as a Class IS, I, II, III, or IV wastewater treatment works operator shall submit a written application to the secretary at least thirty (30) days prior to the date the applicant wishes to take the certification examination. The application shall be on a form furnished by the secretary and shall include documentation of experience and education required by this rule.

6.5. The secretary conducts written examinations for Class IS, I, II, III, and IV wastewater treatment works operator certification, and notifies applicants of the date, time and place of examination. The secretary shall not permit an applicant who has knowingly submitted false or incorrect information on the application to take the examination.

6.6. An individual shall make a score of seventy percent (70%) on the examination in order to attain a passing grade.

6.7. Applicants who fail an examination shall wait sixty (60) days from the date they took the examination before reapplying for the examination. Applicants who fail the same examination level three (3) times in a one (1) year period shall wait a minimum of one (1) year from the date they failed the examination for the third time to apply for re-examination.

6.8. The secretary shall issue a Class IS wastewater treatment works operator certificate to an individual if the individual:

6.8.1. Takes twenty-four (24) hours of Class IS operator training and passes the examination for Class IS; or

6.8.2. Has five hundred (500) hours of on-site operating experience at a Class IS waste water treatment works and passes the Class IS examination.

6.9. The secretary shall issue a Class I, II, III or IV wastewater treatment works operator certificate to an individual if the individual:

6.9.1. Attains a passing grade on the examination for the class;

6.9.2. Has previously been certified at the next lower class level, except that prior certification at Class IS is not required for Class I certification; and

6.9.3. Meets the education and experience requirements specified for the class in Section 7 of this rule. The director may issue multiple class level certificates to an individual simultaneously.

6.10. The certificate of any individual who has not been gainfully employed as a wastewater treatment works operator, shift operator, chief operator, laboratory analyst, or supervisor in a classified wastewater treatment works for a two (2) year period shall expire.

6.11. Certificates of Class IS, I, and II operators and operator-in-training certificates which are valid at the time this rule becomes effective shall continue in effect as long as the individual to whom the certificate is issued remains in compliance with this rule. Certificates of Class III and Class IV operators shall expire three (3) years from the date of issuance of the certificate, except as specified in Section 7.5.3 of this rule.

6.12. Individuals who desire to renew their Class III or IV wastewater treatment works operator certificate shall submit an application for renewal, on a form supplied by the secretary, and documentation of the training credits required by this rule thirty (30) days before the expiration of the certificate.

6.13. Individuals whose certificates have expired under the provisions of Sections 6.10 or 6.11 of this rule who request recertification shall meet the requirements for initial certification at the class level previously held, including passing an examination.

**§64-5-7. Educational Requirements; Experience Substitutes for Education; Education Equivalents; Training Credits; Approval of Training; Experience Requirements; Education and Training Substitutes for Experience; Training Credits Required for Renewal of Class III and IV Certificates.**

**7.1. Educational Requirements.**

7.1.1. A high school education is required for certification as an operator-in-training, except for Class IS wastewater treatment works.

7.1.2. A sixth (6th) grade education is required for certification as a Class IS operator.

7.1.3. A high school education is required for certification as a Class I operator.

7.1.4. A high school education is required for certification as a Class II operator.

7.1.5. Two (2) years of college education are required for certification as a Class III operator.

7.1.6. Four (4) years of college education and completion of a management class approved by the secretary are required for certification as a Class IV operator. The Secretary approves management classes based on their relevance to managing a wastewater treatment works.

7.1.7. Experience may be substituted for education as specified in Section 7.2 of this rule.

**7.2. Experience Substitutes for Education; Education and Training Credit Equivalents; Approval of Training.**

7.2.1. Experience at the preceding certification class level may be substituted on a year for year basis for two (2) years of college education.

7.2.2. Experience used as a substitute for educational requirement can not be used to satisfy experience requirements.

7.2.3. The requirement for one (1) year of college education may be satisfied by: thirty (30) semester hours or forty-five (45) quarter hours of college; or forty-five (45) training credits; or by a combination thereof.

7.2.4. The requirement for one (1) training credit may be satisfied by six (6) hours of classroom instruction, such as courses, seminars, technical conferences, and similar activities.

7.2.5. The secretary approves training credits based on their relevance to the operation of a wastewater treatment works.

**7.3. Experience Requirements.**

7.3.1. No experience is required for certification as an operator-in-training.

7.3.2. No experience is required for a Class IS operator; experience may be substituted for special Class IS training as specified in Section 6.8.2 of this rule.

7.3.3. An individual shall have a minimum of one (1) year of full-time on-site wastewater treatment works operating experience as an operator-in-training to be certified as a Class I operator.

7.3.4. An individual shall have a minimum of three (3) years of full-time on-site wastewater treatment works operating experience at a Class I or higher wastewater treatment works to be certified as a Class II operator.

7.3.5. An individual shall have a minimum of five (5) years of full-time on-site wastewater treatment works operating experience, at least three (3) of which shall be at a Class I or higher wastewater treatment works and two (2) of which shall be at a Class II or higher wastewater treatment works, to be certified as a Class III operator.

7.3.6. An individual shall have a minimum of six (6) years of full-time on-site wastewater treatment works operating experience, at least three (3) of which shall be at a Class II or higher wastewater treatment works and three (3) of which shall be at a Class III or higher wastewater treatment works, to be certified as a Class IV operator.

7.3.7. Two thousand (2,000) hours of wastewater treatment works operating experience may be substituted for one (1) of the years of full-time wastewater treatment works operating experience required for a Class II or higher operator's certificate.

7.3.8. Education and training may be substituted for experience as specified in Section 7.4 of this rule.

**7.4. Education and Training Substitutes for Experience.**

7.4.1. Twenty-four (24) classroom hours of IS operator training may be substituted for four (4) of the training credits used to substitute for educational requirements for a Class II or higher certificate.

7.4.2. A maximum of two (2) years of college education may be substituted on a year for year basis for the experience requirement for Class II certification.

7.4.3. A maximum of three (3) years of college education

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may be substituted on a year for year basis for the Class I experience requirements for Class III certificates.

7.4.4. A maximum of three (3) years of college education may be substituted on a year for year basis for the Class II experience requirements for Class IV certificates.

7.4.5. Training credits may be substituted on a year for year basis for an unlimited number of years of experience required by this rule for certification at the Class II level or higher.

7.4.6. Education used as a substitute for experience requirements can not be used to satisfy education requirements.

### 7.5. Training Credits Required for Renewal of Class III and IV Certificates.

7.5.1. Training credit requirements for renewing a Class III wastewater treatment works operator certificate are three (3) training credits every three (3) years.

7.5.2. Training credit requirements for renewing a Class IV wastewater treatment works operator certificate are four (4) training credits every three (3) years.

7.5.3. The three-year period of Sections 7.5.1 and 7.5.2 of this rule begins on the date the certificate is issued, except that for individuals who have valid Class III and IV certificates as of the effective date of this rule, the three-year period begins on the effective date of this rule.

### §64-5-8. Reciprocity.

The secretary shall issue an appropriate wastewater treatment works operator certificate to the holder of a currently valid wastewater treatment works operator certificate issued by a governmental agency or another state upon presentation of written documentation of the following:

8.1. The applicant has been offered and has accepted employment in West Virginia which requires a certified operator;

8.2. The applicant has successfully passed an examination at least equivalent to that given under this rule for the class of certificate issued;

8.3. The applicant meets the educational and experience requirements of this rule for the class of certificate issued; and

8.4. The issuing authority grants reciprocity to West Virginia wastewater treatment works operators.

### §64-5-9. Penalties.

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9.1. The secretary may revoke the operator certificate of any individual for:

9.1.1. The use of fraud or deceit in obtaining a certificate; or

9.1.2. Neglect, incompetency or misconduct in performing the duties of a wastewater treatment works operator; or

9.1.3. Failure to comply with this rule.

9.2. The secretary shall revoke the operator certificate of any individual who fails to provide the notification required by Section 5.8.2 of this rule unless the individual has been discharged by the wastewater treatment works or other extenuating factors exist.

9.3. The secretary may reinstate the certificate of any individual whose certificate has been revoked upon presentation of evidence satisfactory to the secretary warranting the reinstatement.

9.4. Any person who violates any provision of this rule is guilty of a misdemeanor and upon conviction is punishable 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 in W. Va. Code §16-1-18. Each day's failure to comply with any applicable provision of this rule constitutes a separate offense.

**§64-5-10. Administrative Due Process.**

10.1. Those persons adversely affected by the enforcement of this rule, may request an informal conference, in writing, within ten (10) days of the adverse effect. The request shall be precise as to the reasons. The informal conference shall be conducted within thirty (30) days of receipt of the request.

10.2. Those persons adversely affected by the written decision provided subsequent to the informal conference or who initially desire a contested case hearing to determine any rights, duties, interests, or privileges, shall do so in a manner prescribed in Rules of Procedure for Contested Case Hearings and Declaratory Rulings, 64 CSR 1.

**§64-5-11. Severability.**

The provisions of this rule are severable. If any provisions of this rule are held invalid, the remaining provisions remain in effect.

TABLE 64.5A. Point Rating System for Wastewater Treatment Works.

ITEM	POINT RATING SYSTEM	RATING POINTS
<b>Size</b>		
Maximum population equivalent (P.E.) served . . . .	1 per 10,000 P.E. or part thereof	_____
Design flow (average day) or peak month's flow (average day), whichever is larger, in millions of gallons per day (MGD). . . . .	1 per 1.0 MGD or part thereof	_____
<b>Effluent Discharge</b>		
Receiving stream (sensitivity). . . . .	1 - 6	_____
Land Disposal - evaporation . . . . .	2	_____
Ground Water. . . . .	4	_____
Variation in raw wastes (slight to extreme) . . . .	0 - 6	_____
<b>Pretreatment</b>		
Screening, Comminution. . . . .	3	_____
Grit Removal. . . . .	3	_____
Plant pumping of main flow. . . . .	3	_____
Neutralization. . . . .	1 - 8	_____
<b>Primary Treatment</b>		
Primary clarifiers. . . . .	5	_____
Combined sedimentation/digestion. . . . .	5	_____
Chemical addition (except chlorine, enzymes). . . .	4	_____
<b>Secondary Treatment</b>		
Trickling filtration with secondary clarifiers. . .	10	_____
Activated sludge with secondary clarifiers. . . . .	15	_____
Stabilization ponds without aeration. . . . .	5	_____
Aerated lagoon. . . . .	8	_____
Additional final clarification. . . . .	5	_____
<b>Advanced Waste Treatment</b>		
Polishing Pond. . . . .	2	_____
Chemical/Physical . . . . .	10	_____
Biological or Chemical/Biological . . . . .	12	_____
Ion Exchange, Rev. Osmosis. . . . .	1 - 0	_____
Chemical Recovery, carbon regeneration. . . . .	4	_____
<b>Solids Handling</b>		
Thickening. . . . .	5	_____
Anaerobic Digestion . . . . .	10	_____
Aerobic Digestion . . . . .	6	_____
Evaporative sludge drying . . . . .	2	_____
Mechanical Dewatering . . . . .	8	_____
Solids Reduction (Incineration, Wet Oxidation). . .	12	_____
<b>Disinfection</b>		
On-site generation of disinfectant. . . . .	4	_____
On-site generation of disinfectant. . . . .	5	_____
<b>Laboratory Control by Plant Personnel</b>		
Bacteriological (complexity). . . . .	0 - 10	_____
Chemical/Physical (complexity). . . . .	0 - 10	_____
<b>Other (as determined by the secretary) . . . . .</b>		
<b>TOTAL RATING POINTS. . . . .</b>		_____

TABLE 64.5B. WASTEWATER TREATMENT WORKS CLASSIFICATION SYSTEM<sup>1</sup>

CLASS	IS	I	II	III	IV
Wastewater Treatment Works Point Rating	N/A	0 to 30	31 to 55	56 to 75	76 or more
Population Equivalent Served	less than 501	501 to 1,500	1,501 to 15,000	15,001 to 50,000	50,001 or more

<sup>1</sup>If the ranges of total point rating and population differ from those contained in the table, the secretary shall determine the appropriate facility classification, taking into account the public health and safety, the type of system, the history of the system, the type of the treatment process, and, in the instance of small communities which have "natural" treatment systems, the potential for adverse economic impact.

**Table 1. Comparison of Old and Proposed New Wastewater Treatment Works and Operators Rule**

Table 1 below indicates in order by the old section number the location by section number of corresponding text, if any, in the new rule. The existing rule has been substantially rewritten and reorganized for purposes of clarification. The reorganization and clarification makes it occasionally awkward to specify precisely the location of corresponding old and new text and to clearly distinguish between substantive amendments, clarifications and simple stylistic rewriting. Unnecessary or repetitive text has been deleted. The Comment column indicates the types of changes made, according to the key shown below and summarizes substantive revisions of existing requirements.

A = Substantive Amendment  
C = Clarification

D = Deletion  
T = Technical Revision

Old #	New #	Comment
1.1	1.1	C - Clarifies that the rule applies to wastewater treatment works as well as to wastewater treatment works operators.
1.2	1.2	T - Rule-making authority of the Board of Health (abolished) is now assigned to the Secretary of the Department of Health and Human Resources.
1.3	1.3	
1.4	1.4	
2.1	1.5	
3.1	2.1	C - See §1.1.
3.2	2.2	T - See 1.2.
4.1	-	D
4.2	-	D - Replaced by "Chief Operator" (3.1).
4.3	-	D - Replaced by "Secretary" (3.7).
4.4	3.6	C
4.5	3.3	A - Adds individuals who perform supervisory functions added to the definition of "operator."
4.6	3.4 & 6.3	
4.7	-	D - Incorporated in the definition of "person" (3.5).
4.8	3.8	A - Raises the upper limit of a Class IS wastewater treatment works from 400 to 500 population equivalent served to correspond to the Department's Sewage System Rules, 64 CSR 9.
4.9	3.9	C
4.10	3.10	
5.1 & 5.2	4.1 & 4.2	
6.1	5.1	

Old #	New #	Comment
6.2	5.2 5.5	Term "chief operator" substituted for "certified operator." A - Chief operator required to be on-site at a new facility when construction is 25% complete instead of 50%.
6.3	5.3	A - Old rule allowed the individual responsible for operations to be part-time at any class wastewater treatment works. New rule conditionally permits part-time only at Class IS or I.
6.4	-	D
7.1	5.7 5.9 6.10	Supervision requirements - §§5.6 & 5.7. Display of operator certificates at the wastewater treatment works - §5.9. Certificate expiration - §6.10.
8.1	6.4 6.5	
9.1 - 9.5	See Comment Column	Section 9 & part of Section 11 of the existing rule are replaced by Section 7 which details education and experience requirements and equivalents for the various levels of wastewater treatment works operators. Existing requirements are clarified and reorganized. A requirement for continuing training for renewal of Class III & IV is added.
10.1	-	D
11.1 - 11.3	3.2 6.4	Definition of high school education - §3.2. Documentation - §6.4. See also comment for Section 9.
12.1	-	D
12.2	6.6	
12.3	6.7	A/C - Adds a requirement that an individual who fails the same examination 3 times must wait a year from the date of the third time before being eligible for re-examination.
13.1	7.3.1	C
13.2	6.1	A/C - Adds penalty for operator-in-training applicants who do not apply for their certificate within 1 month of beginning employment by counting the experience of late applicants as beginning only at the time of receipt of the application; clarifies details of the application process.
13.3	5.7	C
13.4	6.2	C
14.1	6.5 6.8 6.9	C/A §§6.4 & 6.5 clarify the examination/testing procedure. §§6.8 & 6.9 clarify "qualified" (to receive a certificate). §6.5 also contains a new provision regarding not testing individuals who provide false information.
15.1 15.2	See comment	Section 9 of the new rule combines former Sections 15 and 18. It incorporates a new general statement setting non-compliance with the rule as grounds for revocation of a certificate.

Old #	New #	Comment
16.1 16.2	8.1 - 8.4	C/A - Section 8 clarifies and reorganizes former Section 16, Reciprocity. A requirement for reciprocal reciprocity from the issuing state is added.
17.1	11	
18.1	See comment for former Section 15.	
19.1	10.2	

Table 2. New Requirements

5.4	Qualifications for Class IS chief operator.
5.7.1	Makes compliance with Sewage System Rules, 64 CSR 9, an explicit rather than implicit requirement.
6.9.2	Adds a requirement for certification at the next lower class level, thus effectively requiring certification in sequential order.
6.11 6.12	Establishes an expiration mechanism for Class III and IV certificates to facilitate monitoring and enforcing the new continuing training requirements and a renewal process.
8.4	Limits reciprocity to states which grant reciprocity to W. Va.
9.1.3	Adds failure to comply with this rule as grounds for revocation of a certificate.
10.1	Establishes an informal conference process.