

WEST VIRGINIA LEGISLATIVE RULES  
BOARD OF HEALTH

Chapter 16-1  
Series V  
(1983)

Waste Water Treatment Works Operator

WEST VIRGINIA LEGISLATIVE RULES  
BOARD OF HEALTH

Waste Water Treatment Works Operator

Chapter 16-1  
Series V  
(1983)

INDEX

	PAGE
Section 1. General	1
Section 2. Application and Enforcement	1
Section 3. Definitions	1
Section 4. Classification of Waste Water Treatment Works	3
Section 5. Certification of Waste Water Treatment Works Operators	5
Section 6. Issuance of Certificates	6
Section 7. Application for Examination and Certification	7
Section 8. Qualifications for Certification	7
Section 9. Requirements for Certification of Waste Water Treatment Works Operators	8
Section 10. Education - Experience Credits	9
Section 11. Rules of the Examination	9
Section 12. Operator in Training (OIT)	10
Section 13. Examinations	11
Section 14. Revocation of Certificates	11
Section 15. Reciprocity	11
Section 16. Repeal of Former Regulations	12
Section 17. Severability	12
Section 18. Penalties	12

WEST VIRGINIA LEGISLATIVE RULES  
BOARD OF HEALTH

Chapter 16-1  
Series V  
1983

Subject: Waste Water Treatment Works Operator

---

Section 1. General

1.1. Scope - These legislative rules establish the certification requirements for waste water treatment works operator.

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

1.3. Filing Date - These legislative rules were filed on the 30th day of September 1974, in the Secretary of State's office.

1.4. Effective Date - These legislative rules became effective on the first day of January, 1983.

1.5. Refiling Date - These legislative rules were refiled pursuant to Chapter 29A, Article 2, Section 5 of the West Virginia Code of 1931, as amended on the 30th day of December 1982, in the Secretary of State's office.

Section 2. Application and Enforcement

2.1. Application - These legislative rules apply to all persons seeking or holding certification as an operator of a waste water treatment system.

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

Section 3. Definitions

3.1. Certificate - A written document issued by the division of sanitary engineering giving a designated person permission to operate a waste water treatment works upon successful completion of the education, experience and examination requirements contained in these regulations.

3.2. Certified Operator - An operator holding a certificate granted by the division of sanitary engineering of a class at least equal to that required by the waste water treatment works classification where he is employed.

3.3. Division of Sanitary Engineering - As used in this regulation is the division of sanitary engineering, state department of health.

3.4. Equivalent Population Served - Shall be the calculated population being served by a waste water treatment works based on the amount and/or strength of the waste water being received at the waste water treatment works. Population equivalents are computed to be 0.17 pounds of five day biochemical oxygen demand or 0.20 pounds of suspended solids per person per day, with the larger figure governing.

3.5. Operator - A person who has been granted a certificate by the division of sanitary engineering to operate a specific classification of waste water treatment works.

3.6. Operator in Training - An individual who meets the education requirement for the Class I-S or Class I operator's certificate and is in the process of meeting the experience requirement.

3.7. Political Subdivisions - Any city, town, village, county, sanitary or public service district, or other special district or government unit operating a waste water treatment works.

3.8. Small Waste Water Treatment System - Any waste water treatment works, other than for individual residences, that treats a daily flow equal to or less than 400 equivalent population.

3.9. Waste Water - Any water-borne waste, whether human, animal, or domestic in nature, which may or may not cause pollution as defined in the West Virginia Code.

3.10. Waste Water Treatment Works - Any facilities for pumping, treating, and discharging waste water.

Section 4. Classification of Waste Water Treatment Works

4.1. Each waste water treatment works, for the purpose of this regulation shall be classified by the division of sanitary engineering as a Class I-S, I, II, III, or IV, works based on complexity of treatment, equivalent population served, downstream water course conditions, and potential health hazards. The total point rating is computed by the following classifications:

POINT SYSTEM CLASSIFICATION  
 OF WASTE WATER TREATMENT WORKS

<u>ITEM</u>	<u>POINT RATING SYSTEM</u>	<u>POINTS RATED</u>
<u>Size</u>		
Maximum population equivalent (P.E.) served.....	1 per 12,500 P.E. or part thereof	_____
Design flow (average day) or peak month's flow (average day), whichever larger.....	1 per 1.25 MGD or part thereof	_____
<u>Effluent Discharge</u>		
Receiving stream (sensitivity).....	2 - 6	_____
Land Disposal - evaporation.....	2	_____
Ground Water.....	4	_____

<u>ITEM</u>	<u>POINT RATING SYSTEM</u>	<u>POINTS RATED</u>
<u>Variation in Raw Wastes (slight to extreme).....</u>	0 - 6	_____
<u>Pretreatment</u>		
Screening, Comminution.....	3	_____
Grit Removal.....	3	_____
Plant pumping of main flow.....	3	_____
Neutralization.....	1 - 8	_____
<u>Primary</u>		
Primary clarifiers.....	5	_____
Combined sedimentation/digestion.....	5	_____
Chemical addition (except chlor., enzymes).....	4	_____
<u>Secondary</u>		
Trickling filtration w/sec. clarifiers.....	12	_____
Activated sludge w/sec. clarifiers.....	15	_____
Stabilization ponds without aeration.....	5	_____
Aerated lagoon, oxidation ditches, etc.....	8	_____
Additional final clarification.....	5	_____
<u>Advanced Waste Treatment</u>		
Polishing Pond.....	2	_____
Chemical/Physical.....	10	_____
Biol. or Chem./Biol.....	12	_____
Ion Exchange, Rev. Osmosis.....	10	_____
Chemical Recovery, carbon regeneration.....	4	_____
<u>Solids Handling</u>		
Thickening.....	5	_____
Anaerobic Digestion.....	10	_____
Aerobic Digestion.....	6	_____
Evaporative sludge drying.....	2	_____
Mechanical Dewatering.....	8	_____
Solids Reduction (Incineration, Wet Oxidation).....	12	_____
<u>Disinfection.....</u>		
On-site generation of disinfectant.....	4	_____
	5	_____
<u>Laboratory Control by Plant Personnel</u>		
Bacteriological (complexity).....	3 - 10	_____
Chemical/Physical (complexity).....	1 - 10	_____
Others (as determined by Division of Sanitary Engineering).....		_____
TOTAL POINT RATING-----		_____

4.2. Classification of waste water treatment works shall be based on the following facility classification table:

Basis of Classification	WORKS					CLASSIFICATION	SYSTEM <sup>1</sup>
	I-S	I	II	III	IV		
Waste Water Treatment Works Point Rating	N/A	0 to 25	26 to 50	51 to 75	76 or more		
Population Equivalent	less than 401	401 to 1,500	1501 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 division of sanitary engineering shall determine the appropriate facility classification.

Section 5. Certification of Waste Water Treatment Works Operators

5.1. All persons operating a waste water treatment works in this state shall be certified by the division of sanitary engineering.

5.2. Each person, firm, corporation, association, partnership, political subdivision, public institution or place operating a waste water treatment works shall place the responsibility for on-site operation of such works under a certified operator having a certificate of the class at least equal to that required by the works classification.

5.3. The certified operator required by Paragraph 5.2 of this section shall be a full time employee of the person, firm, corporation, association, partnership, political subdivision, public institution, or place unless substantial evidence is presented to the director, division of sanitary engineer-

ing, that the services of a full time certified operator cannot be obtained. The director may authorize for a designated period of time a certified operator in the proper class on a part time basis upon submission and approval by the division of sanitary engineering of a plan showing the time, methods, and procedures to be followed. I-S works shall be permitted to employ a part time operator, however, the director, division of sanitary engineering, may require a I-S works to employ either a part time or full time operator with a certificate greater than I-S.

5.4. On and after November 1, 1974, the date these regulations become effective, any persons, firm, corporation, association, partnership, political subdivision, public institution or place, falling under the jurisdiction, restrictions, and definition of said regulation, and not complying thereto, shall be considered in violation thereof and shall be subject to prosecution under the West Virginia Code.

Section 6. Issuance of Certificates - Certificates shall be issued to qualified operators of waste water treatment works in five classifications. A Class I-S certificate shall be issued to those persons who are certified to operate Class I-S waste water treatment works; a Class I certificate shall be issued to those persons who are certified to operate a Class I waste water treatment works; a Class II certificate shall be issued to those persons who are certified to operate a Class II waste water treatment works; a Class III certificate shall be issued to those persons who are certified to operate a Class III waste water treatment works; a Class IV certificate shall be issued to those persons who are certified to operate Class IV waste water treatment works. The certification of any person to operate any class of waste

water treatment works shall, also, authorize such persons to operate any respective waste water treatment works in the classes lower than such classification or in the classes higher than such classification but under the supervision of a certified operator in the same classification as the waste water treatment works. All certificates shall be prominently displayed at the treatment works. The certificate of any operator certified under this regulation, who is not gainfully employed and fulfilling the duties of operator, shift operator, chief operator, or supervisor in a classified waste water treatment works for a two year period, shall expire and be of no further force, effect, or validity.

Section 7. Application for Examination and Certification - Applications shall be made in writing to the division of sanitary engineering at least thirty days prior to the date on which the examination will be given, on a form furnished by the division of sanitary engineering. No applicant shall be examined for certification who submits false and incorrect information in his application for certification.

Section 8. Qualifications for Certification

8.1. Class I-S - Sixth (6th) grade education and at least a minimum of three (3) months experience in the operation of a waste water treatment works or twelve (12) classroom hours of specialized and related training.\*

\* Promulgated March 19, 1975 effective May 1, 1975

8.2. Class I - High school diploma or equivalent and one year at a waste water treatment works as an operator in training.

8.3. Class II - High school diploma or equivalent and three years of Class I or greater works operating experience at a waste water treatment works.

8.4. Class III - Fourteen years of education or equivalent and five years of Class II or greater works operating experience at a waste water treatment works.

8.5. Class IV - Sixteen years of education or equivalent and six years of Class III or greater works operating experience at a waste water treatment works.

Section 9. Requirements for Certification of Waste Water Treatment Works Operators

9.1. Operators possessing certificates before the effective date of these regulations will be issued new certificates by the division of sanitary engineering in accordance with the following schedule:

<u>Existing Certification</u>	<u>New Certification</u>
OIT (Operator in Training)	OIT
IV	I
III	II
II	III
I	III or IV (See Section 9.2)

9.2. Operators who, up until the effective date of these regulations, were certified as Class I operators and employed at a Class IV waste water treatment works as defined in these regulations shall be entitled to a Class IV certification. All such operators shall submit their requests in writing to the division of sanitary engineering for approval and recertification.

9.3. Operators who, up until the effective date of these regulations, were certified as restricted operators or OIT operators will be recertified, on the basis of experience, education and examination passed, by the division of sanitary engineering.

9.4. Those persons not now certified, and who desire certification after the effective date of these regulations, will be classified in accordance with education - experience requirements under Section 8 and examination requirements under Sections 7, 11 and 13 of these regulations.

Section 10. Education - Experience Credits

10.1. Twelve years of education means high school diploma, G.E.D., or other equivalent. Thirty college semester hours shall equal 45 quarter hours and either shall equal one year college credit. Training credits (T.C.) for specialized operator training courses, seminars, approved technical conferences, etc.: six classroom hours of division of sanitary engineering approved courses = 1 T.C. and 45 T.C. = 1 year of college. Written proof of course completion and a request for approval of credit must be submitted to the division of sanitary engineering along with the application for examination.

10.2. Experience, at the next certification level below that being applied for, may be substituted on a year for year basis for the educational requirements beyond the high school level through the fourteenth year. However, any experience used as a substitute for the educational requirements cannot also be credited toward satisfying experience requirements.

10.3. Education, above the high school level, may be substituted on a year for year basis for experience requirements in Classes II, III and IV only. However, any education used as a substitute for the experience requirements cannot also be credited toward satisfying education requirements.

Section 11. Rules of the Examination

11.1. Any applicant who does not meet the prerequisites for an examination in a classification for which he requested certification may be permitted to take an examination in another classification for which he meets the prerequisites.

11.2. A grade of not less than 70% shall be considered passing.

11.3. Any applicant who has failed an examination shall wait sixty days before reapplying for such examination.

Section 12. Operator in Training (OIT)

12.1. A certificate of this class is limited to new personnel without any prior experience.

12.2. Written application for an operator in training certificate shall be made to the division of sanitary engineering on a form provided by the division, within one month after employment as an operator in training.

12.3. Operators under the OIT certificate must be under the supervision of a certified operator.

12.4. Operator in training certificates shall be valid for one year. The individual will be considered for recertification if he makes written application for same to the division of sanitary engineering thirty days prior to certificate expiration.

Section 13. Examinations - The division of sanitary engineering shall provide for the examination of persons desiring to be certified to operate a waste water treatment works, and for the issuance of appropriate certificates in classifications I-S, I, II, III or IV to qualified applicants passing the examination. Written examinations for waste water treatment works operators certification will be arranged by the division of sanitary engineer-

ing. The times and places for the examinations will be designated by the division of sanitary engineering which shall notify the applicants of same.

Section 14. Revocation of Certificates

14.1. The division of sanitary engineering may revoke the certificates of any person who practices fraud or deceit in obtaining a certificate or for neglect, incompetency, or misconduct in the performance of the duties of an operator of a waste water treatment works or parts thereof, including non-compliance with Chapter 1, Article 11, of the environmental health regulations which relates to waste water treatment works control tests and records. The division of sanitary engineering may reinstate any person whose certificate has been revoked upon presentation of evidence, satisfactory to the division, which warrants such reinstatement.

14.2. An operator employed at a waste water treatment works shall notify the division of sanitary engineering at least thirty (30) days prior to terminating his employment. Failure to notify the division of sanitary engineering shall be cause for automatic certificate revocation; however, automatic revocation shall not occur if the operator has been discharged by his supervisor.

Section 15. Reciprocity - The division of sanitary engineering shall consider for West Virginia certification the holder of a certificate issued by a governmental agency or another state, upon presentation of satisfactory evidence of the following:

The applicant has been offered and has accepted employment in West Virginia which requires a certified operator. The applicant has successfully passed an examination at least equivalent to that given under this regulation.

Section 16. Repeal of Former Regulations - All regulations previously adopted by the West Virginia state board of health which are in conflict with the provisions of these regulations are hereby repealed.

Section 17. Severability - Each section of this regulation and every part of each section is an independent section and a part of a section, and the holding of any section or part thereof to be unconstitutional, void, or ineffective for any cause does not affect the validity or constitutionality of any other section or part thereof.

Section 18. Penalties - Any person who violates any provision of these regulations or any regulation adopted by the West Virginia 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 30 days or both fine and imprisonment as provided in Chapter 16, Article I, Section 20, 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.

WEST VIRGINIA LEGISLATIVE RULES  
BOARD OF HEALTH

Small Sewage and Excreta Disposal Systems

Chapter 16-1  
Series IX  
(1983)

INDEX

	Page
Section 1. General	1
Section 2. Definitions	1
Section 3. Sewage and Excreta Disposal Requirements	6
Section 4. Permits	9
Section 5. Inspections	14
Section 6. Construction and Installation Requirements	15
Section 7. Subdivisions and Housing Developments	23
Section 8. Design, Construction, Installation and Operation of Small Sewage and Excreta Disposal Systems	26
Section 9. Sewage Tank Cleaners	27
Section 10. Septic Tank Contractors and Installers Certification	30
Section 11. Repeal of Former Regulations	32
Section 12. Severability	32
Section 13. Penalties for Violating Provisions of Regulations	33