



## FISCAL NOTE FOR PROPOSED RULES

Rule Title: 64CSR5 - Wastewater Systems and Operators

Type of Rule:                      X   Legislative                           Interpretive                           Procedural

Agency: Health and Human Resources

Address: One Davis Square, Suite 100 East  
Charleston, WV 25301

Phone Number: 304-356-4122                    Email: Ann.A.Goldberg@wv.gov

### Fiscal Note Summary

Summarize in a clear and concise manner what effect this measure will have on costs and revenues of state government.

Additional costs are expected with these regulatory changes due to the classification levels for the wastewater operator and the addition of classifications, enforcement efforts, outreach, educational programs and the continuing education program. Revenues will be generated by renewal fees from certified wastewater operators and late renewal of certifications. The proposed fees are necessary to ensure that the program has adequate resources to fulfill its obligations under the rules. Additional support will be required from state general revenue.

### Fiscal Note Detail

Show over-all effect in Item 1 and 2 and, in Item 3, give an explanation of Breakdown by fiscal year, including long-range effect.

Effect of Proposal	Fiscal Year		
	2011 Increase/Decrease (use "-" )	2012 Increase/Decrease (use "-" )	Fiscal Year (Upon Full Implementation)
<b>1. Estimated Total Cost</b>	265,000	265,000	265,000
Personal Services	202,500	202,500	202,500
Current Expenses	62,500	62,500	62,500
Repairs and Alterations			
Equipment			
Other			
<b>2. Estimated Total Revenues</b>	42,850	164,650	103,750

**3. Explanation of above estimates (including long-range effect):**

Please include any increase or decrease in fees in your estimated total revenues.

Current personnel program cost annually is estimated at \$91,000 based on 1.5 FTEs. Under the current rule, only OITs, Class III, and Class IV operators renew every 3 years. Under the proposed rule, 2 classifications were added and all operators have 2 year renewal requirements, there will be more on site review and determinations concerning operator coverage and additional administration of the continuing education program. It is estimated that staffing would have to increase to 3.25 FTEs to fully implement the new requirements, which has an estimated associated personnel cost of \$202,500. The estimated total cost for implementation would be \$265,000. Based on estimates of the total number of certified operators in each classification with the proposed fees, the cost needing funding is anticipated to be approximately \$161,250 annually fully implemented.

The Department proposes an initial and then biennial renewal fee for all certifications. The certification fees will be used to offset program costs incurred through application and test reviews, issuing, renewing certifications and tracking compliance of certified individuals.

**Memorandum**

Please identify any areas of vagueness, technical defects, reasons the proposed rule **would not** have a fiscal impact, and/or any special issues **not** captured elsewhere on this form.

The Department has evaluated these rules, and has determined that they are necessary, reasonable, and proper for the purpose as proposed.

Date

7/28/2011

Agency

Department of Health and Human Resources

Authorized Representative

Michael J. Lewis ssp

Michael J. Lewis, M.D., Ph.D.

Cabinet Secretary

Legislative Rule, 64CSR5  
Department of Health and Human Resources  
Bureau for Public Health  
Office of Environmental Health Services  
Wastewater Systems and Operators

### **BRIEF SUMMARY**

The proposed rule consists of several major changes based on a stakeholder workgroup that consisted of state regulatory agencies, training providers, and industry related associations during several meetings which occurred over more than a year period. This workgroup reviewed the rule and proposed revisions based on mirroring the Public Water Systems Operator Regulations (64CSR04) and on technology changes. Renewal requirements were added to all classifications, where previously they only existed for OIT, Class III and Class IV operators. Class H and Class C systems and operator certifications were added to Section 4.1. to ensure certified operator coverage at these types of wastewater systems. Previously, collection system certification was voluntary and Class H coverage was approved by Department of Environmental Protection staff. Advanced designation of wastewater systems and operators has been added. Class II through Class IV certification experience requirements have been reduced by one year to more appropriately reflect the current training needs. The examination score expiration date has been reduced from no expiration to five years, which more appropriately reflects changes in technology and examination versions. Chief Operator requirements have been added. Initial and renewal certification fees were added for most certifications to support program administration. Clarification on adequate operator coverage for wastewater systems was also added to reflect modern communication resources, improve consistency in implementation and communication of intent. Limits were added to non treatment related operator experience such as laboratory, maintenance and collection duties.

### **STATEMENT OF CIRCUMSTANCES**

The Bureau for Public Health seeks to amend the rule for Wastewater Systems and Operators. The changes are needed to provide consistency between water and wastewater operator requirements, update the rules due to changes in technology, ensure baseline standards and incorporate new classification and related operator certification classifications. These proposed changes were also posted on the Certification & Training Program website at <http://www.wvdhhr.org/oehs/eed/swap/training%26certification/> and presented numerous times at the largest wastewater industry conferences in WV.

**QUESTIONNAIRE**

*(Please include a copy of this form with each filing of your rule: Notice of Public Hearing or Comment Period; Proposed Rule, and if needed, Emergency and Modified Rule.)*

DATE: July 29 , 2011

TO: LEGISLATIVE RULE-MAKING REVIEW COMMITTEE

FROM: (Agency Name, Address & Phone No.) Ann A. Goldberg, Director  
Public Health Regulations  
Bureau for Public Health  
350 Capitol Street, Room 702  
Charleston, WV 25301  
(304) 558-2971 phone; (304) 558-1035 fax

LEGISLATIVE RULE TITLE: \_\_\_\_\_  
**WASTEWATER SYSTEMS AND OPERATORS**

1. Authorizing statute(s) citation \_\_\_\_\_  
**WV Code §§16-1-4(c).**

2. a. Date filed in State Register with Notice of Hearing or Public Comment Period:  
June 17th, 2011

b. What other notice, including advertising, did you give of the hearing?  
\_\_\_\_\_  
\_\_\_\_\_

c. Date of Public Hearing(s) *or* Public Comment Period ended:  
Public comment period ended July 18th, 2011

d. Attach list of persons who appeared at hearing, comments received, amendments, reasons for amendments.

Attached     X     No comments received \_\_\_\_\_

- e. Date you filed in State Register the agency approved proposed Legislative Rule following public hearing: (be exact)

July 29 , 2011

---

- f. Name, title, address and phone/fax/e-mail numbers of agency person(s) to receive all *written correspondence* regarding this rule: (Please type)

Ann A. Goldberg, Director, Public Health Regulations  
Bureau for Public Health, Department of Health and Human Resources  
350 Capitol St. Room 702, Charleston, WV 25301

---

(304) 558-2971 phone; (304) 558-1035 fax

---

ann.a.goldberg@wv.gov

---

- g. **IF DIFFERENT FROM ITEM 'f'**, please give Name, title, address and phone number(s) of agency person(s) who wrote and/or has responsibility for the contents of this rule: (Please type)

Walt Ivey, Director, Environmental Engineering Division  
Office of Environmental Health Services, BPH/DHHR  
350 Capitol St.. Rm. 313, Charleston, WV 25301

---

(304) 558-2981 phone; (304) 558-0289 fax

---

walter.m.ivey@wv.gov

---

3. If the statute under which you promulgated the submitted rules requires certain findings and determinations to be made as a condition precedent to their promulgation:

- a. Give the date upon which you filed in the State Register a notice of the time and place of a hearing for the taking of evidence and a general description of the issues to be decided.

n/a

---

---

---

---

b. Date of hearing or comment period:

June 17 - July 18, 2011

c. On what date did you file in the State Register the findings and determinations required together with the reasons therefor?

n/a

d. Attach findings and determinations and reasons:

Attached n/a

## 64CSR5 PUBLIC COMMENTS AND RESPONSES

1. Sanitary Board of Bluefield, Wilbur Smith/Ronald Dodson, 7-11-11
2. WV Municipal Water Quality Association, Paul Calamita, 7-17-11
3. Berkeley County PSSD, Gina Keller, 7-18-11

### **COMMENT #1: Sanitary Board of Bluefield, Wilbur Smith/Ronald Dodson, 7-11-11**

**From:** Ronald Dodson [mailto:rdodson@bluefieldsanitary.org]

**Sent:** Monday, July 11, 2011 9:59 AM

**To:** Goldberg, Ann A

**Cc:** Ivey, Walter M

**Subject:** Comment letter to proposed rule changes

Attached is the comment letter to the proposed rule changes

--

Ronald L Dodson  
Sanitary Board of Bluefield  
100 Rogers Street  
PO Box 998  
Bluefield, WV 24701  
Bus: (304) 325-3681  
Mobile: (304) 320-1361  
Bus Fax: (304) 325-6838  
E-mail: rdodson@bluefieldsanitary.org  
www.bluefieldsanitary.org

### FOLLOWING IS RETYPED FROM HARDCOPY:

July 6, 2011

The follow comments are in reference to the above mentioned proposed rule.

1. For clarity the word flow needs to be defined as either actual flow or design flow.
2. Notification of voluntary termination of employment in 5.2.d and 5.2.e needs to be uniform or 5.2.e needs to be removed. The procedure outlined in Resignation Form ES-74 is more than fare and adequate to all concerned.
3. Under Education Requirements in 7.6 computer and engineering related courses should be added.
4. Under Renewal Requirements in 10.3 Class I and Class II should have same CEH requirement of twelve (12) CEHs.
5. In table 64-5A Fees the renewal fees should not exceed \$50.00 per year with a maximum of \$100.00 for a two year span.

Wilbur Smith, PE

Executive Director  
Bluefield Sanitary Board

**RESPONSE #1:**

Mr. Wilbur Smith, PE  
The Sanitary Board of Bluefield  
PO Box 998  
Bluefield, WV 24701

Dear Mr. Smith:

This letter is to confirm receipt of your enclosed written comments dated July 6, 2011 on the proposed changes to *Wastewater Treatment Works and Operators (64CSR5)* and provide written response.

Based on your suggestion and concerns raised by others on subsection 4.1, flow was clarified in the proposed draft and now reads:

*4.1. A wastewater system is classified on the basis of the permitted flow capacity and complexity of wastewater treatment processes.*

Thank you for commenting the current ES-74 form is fair and adequate in supporting proper voluntary termination notification. The requirement for operators to notify the Commissioner 30 days prior to termination is not changed from the current rule (1995) intent and will be maintained. Although the intent of proposed subsection 5.2.d was to support communication between system owner and operators with respect to employment changes in advance so proper arrangements could be made, based on the comments received, this addition will not be included in the proposed draft. Although not mandated by a formal rule, OEHS still strongly suggests all certified operators provide at least the 2 week notice to the system owner as a professional courtesy so plans can be made for their replacement.

Based on your suggestion, the proposed draft was modified and now reads:

*7.6. All education courses for CEU shall be evaluated by the Commissioner. One hundred percent (100%) credit shall be awarded for those deemed to be directly related to wastewater treatment and collection (examples are mathematics, science, computer, engineering and business courses). If the Commissioner deems the course not directly related, fifty percent (50%) credit shall be awarded.*

Based on your suggestion and further discussion on the renewal requirements for each classification level, the proposed draft was modified and now reads:

*10.3.d. Class I and II: twelve (12) CEHs*

*10.3.e. Class III and IV: twenty four (24) CEHs*

The fees in the proposed draft will be maintained as they are based on program cost estimates to for rule implementation. Similar fees in surrounding states were also researched to help ensure they are not excessive and were found to be comparable.

Thank you for your input.

**COMMENT #2: WV Municipal Water Quality Association, Paul Calamita, 7-17-11**

**From:** Calamita, Paul [mailto:paul@aqualaw.com]

**Sent:** Sunday, July 17, 2011 2:14 PM

**To:** Goldberg, Ann A; walter.m.ivy@wv.gov

**Cc:** Newell, Dawn A

**Subject:** Comments on Proposed Revisions to Wastewater Treatment Works and Operators Regulations

I am writing to provide the following comments on the referenced proposed regulations on behalf of the West Virginia Municipal Water Quality Association.

Section 4.1.h – definition of advanced facilities. We question whether the criteria of “phosphorous removal”, “ammonia stripping”, and “chemical coagulation” warrant designating a facility as an advanced facility. We believe that the advanced designation should really apply to tertiary facilities rather than secondary facilities that happy to remove phosphorous or employ chemical coagulation.

Section 5.2.b – we object to the requirement that operators have to carry their certification card at all times while operating the plant. This is unnecessary. The rules require that each facility post the current list of certified operators at the plant and that is enough. We urge the Commissioner to delete this requirement.

Section 5.2.e – we object to the requirement that a certified operator notify the Commissioner 30 days before voluntarily terminating his employment. We think this should be within 30 days following a voluntary termination. We note that operators must give wastewater system owners 12 days notice, which will ensure that system owners have adequate time to ensure seamless staffing. Requiring 30 day advance notice is unnecessary and imposes unnecessary liability on operators if they fail to make this notice. However, providing notice to the Commissioner within 30 days after voluntarily terminating employment makes sense.

Section 5.4.a.2 - This section requires that the POTW owner must employ a Chief Operator when construction of a new POTW is 25% complete. We suggest that language be added to allow the Commissioner the discretion to waive this requirement.

Section 5.4.d – We object to the requirement to notify the Commissioner within 24 hours of any employment status changes of the system certified operators. We believe this should be changed to a 30-day rather the 24-hour requirement.

5.4.g same comment as above for 54.a.2.

8.4 and 8.5 We do not think the Commissioner should impose a specific hour limitation for collection system operation and lab work. We suggest this limitation be a narrative requirement that is more flexible.

14.1.e. We believe the compliance requirement is too broad. Operators should not be subject to suspension or revocation by the Commissioner for minor permit violations (such as a failure to monitor). Minor non-compliance should be left to system owners to address. We think suspension/revocation authority should be subject to some criteria, such as for significant, intentional, grossly negligent or repetitive non-compliance by an operator.

Table 65-5B We object to the numerical criteria for defining the required yearly experience requirements for Classes I through IV. For example, imposing a 2000 hour requirement means 50 40-hour work weeks. That leaves two weeks for vacation and no sick days. We think the Table should simply specify "one year of full time wastewater experience" and leave it at that. Alternatively, if the Commissioner insists on specifying a numerical minimum, despite our objection, it should be set at 1600-1800 hour "years" rather than 2000.

Table 64-5C Same comment, the reference to 2000 hours should be changed to "One-Year".

Thank you for considering our comments. Please let me know if you have any questions

Paul Calamita  
WVMWQA  
General Counsel  
AQUALAW  
(804) 716-9021 x201  
(804) 716-9022 (fax)  
(804) 938-4211 (cell)  
[www.AquaLaw.com](http://www.AquaLaw.com)

**RESPONSE #2:**

Mr. Paul Calamita, General Counsel  
WV Municipal Water Quality Association  
P.O. Box 51  
Richmond, VA 23218

Dear Mr. Calamita:

This letter is to confirm receipt of your enclosed written comments on the proposed changes to *Wastewater Treatment Works and Operators* (64CSR5) on July 17, 2011 and provide written response.

Specifications within subsection 4.1.h are based on the need for advanced treatment due to Chesapeake Bay initiatives to reduce discharge parameters. These reduced discharge parameters will eventually be considered statewide. The standard operator courses also do not commonly teach these technologies.

Subsection 5.2.b requiring operators to carry their current certification card upon them is not changed from the current rule (2007) and will be maintained.

The requirement for operators to notify the Commissioner 30 days prior to termination is not changed from the current rule (1995) intent and will be maintained. Although the intent of proposed subsection 5.2.d was to support communication between system owner and operators with respect to employment changes in advance so proper arrangements could be made, based on the comments received, this addition will not be included in the proposed draft. Although not mandated by a formal rule, OEHS still strongly suggests all certified operators provide at least the 2 week notice to the system owner as a professional courtesy so plans can be made for their replacement.

Subsection 5.4.a.2 is based on the current rule (1995) and will be maintained.

Subsection 5.4.d requiring system owners to notify the Commissioner and Secretary of any certified operator employment changes within 24 hours is intended as a public health protection mechanism and improvement. Certified operators are another system asset that must be properly documented and accounted for. Maintenance of the notification requirements will support overall system compliance.

Subsection 5.4.g is based on 5.4.a.2 and gives the Chief Operator additional time to obtain the required advanced training course.

The intent of subsections 8.4 and 8.5 are to ensure individuals operating Class I and higher PWSs had the majority of their experience in the treatment of wastewater, not other operational duties. The lab specification was added based on our experience with laboratory personnel pursuing operator certifications and is a safeguard to ensure wastewater treatment and operational experience for Class I and higher operators.

Our experience in implementing the compliance actions under the current rule has been reasonable. Typically OEHS has not been involved with minor issues that could be resolved at the system management level. The intent of subsection 14.1 is only to appropriately address intentional and significant actions.

The 1995 rule was more general with the experience requirements in years. However, we developed the 2,000 hour specification in the proposed draft based on the current *Public Water Systems Operator Regulations* (64CSR4 from 2007) which is based on a full-time employee in general and will maintain to ensure operators transitioning from operators-in-training under the Chief Operators responsibility to a Class I water potentially as the Chief Operator and only operator have at least a minimum of 2,000 hours of experience. These units of measurement also more appropriately capture part-time operator work and related experience.

Thank you for your input.

**COMMENT #3: Berkeley County PSSD, Gina Keller, 7-18-11**

**From:** Gina Keller [mailto:gkeller@bcpsd.com]

**Sent:** Monday, July 18, 2011 11:50 AM

**To:** Goldberg, Ann A; Newell, Dawn A

**Cc:** Brian; George L Sabine Jr.; Clifton D Browning

**Subject:** Comments on Legislative Rule, 64CSR05

Please find attached comments from the Berkeley County Public Service Sewer District in regards to Legislative Rule 64CSR05. Please feel free to contact me if there are any questions.

Thank you,

--

**Gina Keller**

HR Director  
Berkeley County PSSD  
PO Box 944  
Martinsburg, WV 25402

304-596-6960  
304-267-7478 (fax)

## **Comments on Legislative Rule, 64CSR05 Amendments for Wastewater Systems and Operators**

### **§64-5-2. Application and Enforcement**

2.1 Application. – This rule applies to owners and certified operators of wastewater systems and to applicants for certification. **This rule does not apply to industrial wastewater systems which are regulated by the West Virginia Department of Environmental Protection (WVDEP) or to the operators of such industrial wastewater systems.** This rule does not apply to septic tanks serving individual homes unless such systems have a centralized component.

**COMMENT** – BCPSSD handles wastewater treatment management and operation for industrial user Ecolab. It is a pretreatment facility. According to the above statement, this 0.1 MGD plant would not have to comply with any of the regulations proposed.

### **§64-5-4. Classification of Wastewater Systems**

4.1.h. – Advanced – System designation held in addition to Class S and Class I through Class IV classifications, where advanced treatment methods are used.

**COMMENT** – The proposed rules do not say how the system is designated as advanced, and how operators are designated as advanced. Will there be testing involved with each advanced treatment method? How will an operator maintain advanced certification? Will each operator working at that plant be required to receive this designation? Must a Chief Plant Operator have it if they are working at that plant, or may a lower level classification obtain it?

### **§64-5-5. Required Personnel and Conditions of Employment**

5.2.d. and 5.2.e. This rule requires the operator to notify their employer at least 12 days in advance of the voluntary termination of his or her employment at a wastewater system, but would require the operator to notify the Commissioner at least 30 days in advance.

**COMMENT** – We feel that the current rule of allowing 30 days for voluntary resignation, with the option to waive that notice, is reasonable. It often takes over 30 days to replace an employee, and it would be crucial for employers to maintain that 30 day notice period if needed.

5.4.a. Employ a Chief Operator (s) with certification equal to or higher than the system classification.

**COMMENT** – We have multiple large wastewater plants throughout the County. Would we need to employ a Chief Operator at each site, or would we have one Chief Operator to oversee all wastewater operations? Also, we would like to have the option to employ someone to

oversee all operations that may or may not be certified as an Operator. We have tried many times in the past to promote operators to serve as a "Chief" Operator to oversee all of our systems. Much to our dismay, this situation has never worked. We feel that we need to have someone trained as a manager, that has the necessary skills and abilities to manage, track workloads and scheduling and making sure things are getting done, and this person does not necessarily have to have a license to be able to manage our employees in the job that they are doing. Please clarify on this point.

5.4.b. Employ an adequate number of certified operators to operate the system.

**COMMENT** – This seems somewhat ambiguous. Our definition of adequate and the Commissions definition may differ. We feel this deserves more clarification.

5.6.e. Class II, Class III, and IV systems shall be operated on-site at least forty (40) hours per week by an operator with a certification equal to or greater than the system classification.

**COMMENT** – We normally do have all plants covered at least 40 hours per week. However, if someone is off for one day or for a week of vacation, does this mean we will have to have someone cover every hour of every shift someone is not there? For instance, if an operator is off for a day's vacation, we would normally have another operator there, but they may not have the same level of classification. Also, on rare occasions, the plant is unmanned for a day, but we will have someone check it at least once that day to make sure things are ok. Please clarify how strict/lenient this rule will be.

#### **§Section64-5-10. Renewal Requirements.**

**COMMENT** – Since the number of CEH's for each license is increasing, as well as now requiring lower level classifications to obtain CEH's, does this mean that the class offerings will increase to meet those CEH's? Also, will trainings be available in different formats and in different areas to allow those traveling a great distance to minimize travel costs.

#### **RESPONSE #3:**

Mrs. Gina Keller  
Berkeley County Public Service Sewer District  
P.O. Box 944  
Martinsburg, WV 25402

Dear Mrs. Keller:

This letter is to confirm receipt of your enclosed written comments on the proposed changes to *Wastewater Treatment Works and Operators* (64CSR5) on July 18, 2011 and provide written response.

The mentioned pretreatment facility, Ecolab, would be considered industrial and therefore not under our jurisdiction and exempt from the requirements of 64CSR5. OEHS only has authority regulating domestic wastewater.

The newly proposed advanced system designation will be applied to Class S and Class I through Class IV classifications, where advanced treatment methods are used such as; membrane filtration or separate nitrification, denitrification, phosphorous removal, ammonia

stripping, breakpoint chlorination, carbon adsorption, chemical coagulation, flocculation, precipitation, demineralization (ion exchange, reverse osmosis or electrodialysis) or other processes considered advanced by the Commissioner. This designation and any other reclassification in accordance with a rule change will be determined by the DEP and DHHR upon the next field or file review. For an operator to obtain the advanced designation, he or she will have to take a one-time approved training course and pass the advanced exam. The advanced designation does not require renewal as it is held in addition to an operator certification that will be maintained. The individual(s) providing adequate coverage at Class I through IV systems designated as advanced must obtain the advanced designation. Any level certified operator except Class H and Class C may obtain the advanced designation.

Thank you for commenting in support of subsection 5.2.e. The requirement for operators to notify the Commissioner 30 days prior to termination is not changed from the current rule (1995) intent and will be maintained. Although the intent of proposed subsection 5.2.d was to support communication between system owner and operators with respect to employment changes in advance so proper arrangements could be made, based on the comments received, this addition will not be included in the proposed draft. Although not mandated by a formal rule, OEHS still strongly suggests all certified operators provide at least the 2 week notice to the system owner as a professional courtesy so plans can be made for their replacement.

The specified Chief Operator requirements of subsection 5.4.a are a minimum for each public wastewater system. Additional management for owners responsible for multiple systems is voluntary and up to their discretion.

The intent of subsection 5.4.b is to communicate to the system owner their responsibility in supporting operator coverage minimum standards specified in 5.6 to support individual operators and overall system compliance.

Subsection 5.6.e specified minimum operator coverage requirements. If an individual is on leave whether planned or unplanned, there should be arrangements made for continuous certified operator coverage.

The two largest training providers in the state (WV Environmental Training Center and WV Rural Water Association) were involved in this rule revision process and are aware of the increase in CEHs specified in section 10. These local providers have taught numerous approved courses in a variety of formats and locations for many years. There have also been increases in electronic training opportunities and offerings from nationally based training providers for the industry. OEHS will continue to work closely with all training providers to ensure adequate training courses with respect to content, format, and location are available.

Thank you for your input.

**TITLE 64**  
**LEGISLATIVE RULE**  
**DEPARTMENT OF HEALTH AND HUMAN RESOURCES**  
**BUREAU FOR PUBLIC HEALTH**

JUL 29 PM 4:01

**SERIES 5**  
**WASTEWATER SYSTEMS AND OPERATORS**

OFFICE OF THE  
SECRETARY OF STATE

**§64-5-1. General.**

1.1. Scope. -- This legislative rule governs the examination and certification of wastewater operators, establishes a system for the classification of wastewater systems, and specifies certain responsibilities of wastewater systems. The WV Code is available in public libraries and on the Legislature's web page, <http://www.legis.state.wv.us/>.

1.2. Authority. -- WV Code §16-1-4(c).

1.3. Filing Date. --

1.4. Effective Date. --

1.5. Repeal and replacement of former rule. -- This legislative rule repeals and replaces Wastewater Treatment Works and Operators, 64CSR5, effective May 1, 1995.

**§64-5-2. Application and Enforcement.**

2.1. Application. -- This rule applies to owners and certified operators of wastewater systems and to applicants for certification. This rule does not apply to industrial wastewater systems which are regulated by the West Virginia Department of Environmental Protection (WV DEP) or to the operators of such industrial wastewater systems. This rule does not apply to septic tanks serving individual homes unless such systems have a centralized component.

2.2. Enforcement. -- This rule is enforced by the Commissioner of the Bureau for Public Health.

**§64-5-3. Definitions.**

3.1. Adequate. -- A sufficient amount the Commissioner determines, considering treatment complexity, collection system, and other factors such as personnel leave.

3.2. Advanced Operator. -- An individual holding a valid advanced West Virginia wastewater operator designation issued by the Commissioner.

3.3. Certified Operator. -- An individual holding a valid West Virginia wastewater operator certification issued by the Commissioner.

3.4. Chief Operator. -- The certified operator(s) whom the owner designates to be

responsible for managing the daily operational activities of a wastewater system and/or a collection system in a manner that ensures meeting state and federal Clean Water Act rules and regulations.

3.5. Class I Operator. -- An individual holding a valid Class I West Virginia wastewater operator certification issued by the Commissioner.

3.6. Class II Operator. -- An individual holding a valid Class II West Virginia wastewater operator certification issued by the Commissioner.

3.7. Class III Operator. -- An individual holding a valid Class III West Virginia wastewater operator certification issued by the Commissioner.

3.8. Class IV Operator. -- An individual holding a valid Class IV West Virginia wastewater operator certification issued by the Commissioner.

3.9. Class C Operator. -- An individual holding a valid Class C West Virginia wastewater operator certification issued by the Commissioner. Previously referred to as 1C.

3.10. Class H Operator. -- An individual holding a valid Class H West Virginia wastewater operator certification issued by the Commissioner.

3.11. Class HR Operator. -- An individual holding a valid Class H West Virginia wastewater operator certification issued by the Commissioner with restricted (R) operations. This certification only applies to individual homeowners who were grandfathered in accordance with this rule or have taken the Class H course and passed the Class H exam who are limited to operating only their individually owned Class H system(s). Class HR certification does not have a certification fee and does not require a high school diploma or GED.

3.12. Class S Operator. -- An individual holding a valid Class S West Virginia wastewater operator certification issued by the Commissioner. Previously referred to as 1S.

3.13. Collection System. -- Facilities upstream of the wastewater treatment plant used to convey wastewater to the treatment plant.

3.14. Commissioner. -- Commissioner of the West Virginia Bureau for Public Health or his or her designee.

3.15. Continuing Education Hour (CEH). -- One (1) hour of participation in an organized continuing education experience under responsible sponsorship approved by the Commissioner for renewal of wastewater operator certification.

3.16. Continuing Education Unit (CEU). -- Ten (10) CEHs.

3.17. Experience. -- Hands-on work performing certified operator duties at a wastewater system.

3.18. gpd. -- gallons per day.

3.19. Home aeration unit (HAU). -- Sewage treatment and disposal system of domestic sewage only (permitted capability of 600 gpd or less, serving individual residences and/or certain commercial establishments). Also known as aerobic treatment unit (ATU).

3.20. MGD. -- million gallons per day.

3.21. National Pollutant Discharge Elimination System (NPDES). -- The federal wastewater discharge permit issued by the WV DEP.

3.22. Operate. -- To perform the practical work and apply the technical knowledge and operational skills in the treatment and/or collection of wastewater.

3.23. Operator-in-Training (OIT). -- An individual holding a valid operator-in-training certificate issued by the Commissioner, who is training under the responsibility of the Chief Operator at a wastewater system while completing the educational and/or experience requirements to become a Class I operator.

3.24. Owner. -- The person legally responsible for the operation of a wastewater system.

3.25. Person. -- An individual, partnership, association, syndicate, company, firm, trust, corporation, government, institution, department, division, bureau, federal agency, or any other entity recognized by law.

3.26. Secretary. -- Secretary of the West Virginia Department of Environmental Protection (WV DEP) or his or her designee.

3.27. Wastewater. -- Water containing human, animal or domestic waste, except this definition does not include industrial wastewater regulated by the WV DEP.

3.28. Wastewater System. -- A facility collecting, treating and discharging wastewater, except this definition does not include industrial wastewater systems regulated by the WV DEP.

#### **§64-5-4. Classification of Wastewater Systems.**

4.1. A wastewater system is classified on the basis of the permitted flow capacity and complexity of wastewater treatment processes.

4.1.a. Class H – Lagoon, aerated lagoon, stabilization pond, recirculating media filters, package treatment plant, and/or small wastewater systems with flows less than 600 gpd. This rule does not apply to septic tanks serving individual homes.

4.1.b. Class S – Lagoon, aerated lagoon, stabilization pond, recirculating media filters, package treatment plant, and/or small wastewater systems with flows greater than 600 gpd but less than or equal to 0.05 MGD. Can also be multiple individual septic tanks within a managed residential district. Individual home owner septic tanks are only included if maintained under the

jurisdiction of a responsible management entity. Previously referred to as 1S.

4.1.c. Class C – Facilities upstream of the wastewater treatment plant used to collect and convey wastewater and which may include pumps, valves, manholes, tanks and other appurtenances. These facilities are also known as a collection system. This does not include Class S facilities.

4.1.d. Class I – Lagoon, aerated lagoon, stabilization pond and/or wastewater systems with flows greater than 0.05 MGD but less than or equal to 1.0 MGD. Extended aeration package treatment plants with flows greater than 0.05 MGD but less than or equal to 0.1 MGD.

4.1.e. Class II – Lagoon, aerated lagoon, stabilization pond and/or wastewater systems with flows greater than 1.0 MGD but less than or equal to 1.75 MGD. Extended aeration treatment plants with flows greater than 0.1 MGD but less than or equal to 1.75 MGD.

4.1.f. Class III – Facilities with flows greater than 1.75 MGD but less than 6.0 MGD.

4.1.g. Class IV – Facilities with flows equal to or greater than 6.0 MGD.

4.1.h. Advanced – System designation held in addition to Class S and Class I through Class IV classifications, where advanced treatment methods are used such as; membrane filtration or separate nitrification, denitrification, phosphorous removal, ammonia stripping, breakpoint chlorination, carbon adsorption, chemical coagulation, flocculation, precipitation, demineralization (ion exchange, reverse osmosis or electro dialysis) or other processes considered advanced by the Commissioner.

#### **§64-5-5. Required Personnel and Conditions of Employment.**

5.1. Any individual who operates a Class S, Class C, Class I, Class II, Class III, or Class IV wastewater system in West Virginia shall be certified by the Commissioner. Any individual who operates a Class H wastewater system in West Virginia shall be certified by the Commissioner or Secretary.

5.2. All certified wastewater operators shall:

5.2.a. Be responsible for their certification in accordance with all aspects of this rule.

5.2.b. Carry their current certification card issued by the Commissioner upon them at all times the operator is operating the wastewater system.

5.2.c. Not work in a wastewater system using the certification of another person; only the person whose name appears on the operator certification is certified by that document. Certifications are not transferable.

5.2.d. Notify the Commissioner at least thirty (30) calendar days in advance of the voluntary termination of his or her employment at a wastewater system.

5.2.e. Comply with the provisions of Bureau for Public Health rule, Sewer Systems, Sewage Treatment Systems, and Sewage Tank Cleaners, 64CSR9.

5.2.f. Demonstrate data integrity by providing complete, accurate, and true information for the period in which they were responsible for data collection including but not limited to records, reports, and lab results.

5.3. Class H, Class S, and the collection system portion only of a wastewater system under the direct jurisdiction of the treatment plant are not required to designate a Chief Operator;

5.3.a. The owner of a Class H wastewater system shall ensure it is operated by a Class H, Class I or higher wastewater operator.

5.3.b. The owner of a Class S wastewater system shall ensure it is operated by a Class S wastewater operator.

5.3.c. The owner of a Class C wastewater system shall ensure it is operated by a Class C, Class I or higher wastewater operator.

5.4. The owner of a wastewater system shall:

5.4.a. Employ a Chief Operator(s) with certification equal to or higher than the system classification, except for Class H, Class S and Class C systems. A wastewater system shall have more than one Chief Operator if jurisdiction is bifurcated between the collection system and treatment plant or otherwise approved in writing by the Commissioner based upon written request;

5.4.a.1. In the case of collection systems not under the direct jurisdiction of the treatment plant Chief Operator, employ an additional Chief Operator with a Class C, Class I or higher certification and an adequate number of certified operators to operate the collection system.

5.4.a.2. Employ a Chief Operator to be on-site at all new wastewater systems, except for Class H, Class S and Class C, when construction is twenty five percent (25%) complete.

5.4.a.3. Place direct supervision of their wastewater system, including each treatment facility and/or collection system, under the responsible charge of the Chief Operator(s) holding an adequate certification.

5.4.b. Employ an adequate number of certified operators to operate the system;

5.4.c. Not employ more OITs than the number of employed certified operators of higher classification, unless written permission is granted by the Commissioner;

5.4.d. Notify the Commissioner and Secretary within twenty four (24) hours, in a manner and form approved by the Commissioner, of any employment status changes of the system's certified operators, including their reassignment, except for Class H systems;

5.4.e. Submit a personnel status report as of July 1 by July 15 every year, except for Class H systems. The report is to be in a manner and form approved by the Commissioner and required information includes, at a minimum: a list of all certified operators employed, the Chief Operator, and the system owner;

5.4.f. Post a copy of the current certification of all certified operators employed at the wastewater system in a conspicuous location in the wastewater system treatment plant or the wastewater system office, except for Class H systems; and,

5.4.g. Employ an advanced certified operator to be on-site at all new advanced systems when construction is fifty percent (50%) complete.

5.5. The Chief Operator of a wastewater system shall:

5.5.a. Be responsible for the operation of the wastewater system;

5.5.b. Be employed on a full-time basis by the wastewater system owner except in Class C and Class I systems;

5.5.c. Attend a course approved by the Commissioner for training as a Chief Operator. Current Chief Operators shall attend the Chief Operator course within three (3) years of the effective date of this rule. A person newly designated by the owner as the Chief Operator after the effective date of this rule shall attend within one (1) year;

5.5.d. Apply to the Commissioner for OIT certification, on behalf of OIT applicants, within thirty (30) calendar days of their hire at the wastewater system. Experience gained for certification starts only upon the issued date of the OIT certificate;

5.5.e. Be responsible for the training and job duty assignments of OITs and other certified operators and proper documentation of this experience towards certification upgrade;

5.5.f. Renew the OIT certification every two (2) years or until all requirements for Class I certification are met. Submit the renewal application at least thirty (30) calendar days prior to expiration date, in a manner and form approved by the Commissioner. The OIT shall attempt to pass the Class I examination at least once during each two (2) year renewal; and,

5.5.g. Be automatically designated as the Chief Operator if they are the only certified operator who meets the requirements of Section 5.4 for the system.

5.6. Adequate Operator Coverage:

5.6.a. Class H systems shall be operated by a Class H, Class I or higher wastewater operator. A Class H, Class I or higher operator shall be on call twenty four (24) hours a day / seven (7) days a week. An adequate number of on-site visits by a Class H, Class I or higher operator shall be conducted to ensure proper operation in accordance with the NPDES permit.

5.6.b. Class S systems shall be operated by a Class S operator. This certified operator shall be on call twenty four (24) hours a day / seven (7) days a week. An adequate number of on-site visits by a Class S operator shall be conducted to ensure proper operation in accordance with the NPDES permit. If a Class S system is designated as an advanced system, the individual providing adequate coverage in accordance with this section shall have the advanced designation.

5.6.c. Class C systems shall be operated by a Class C, Class I or higher operator who shall be on call twenty four (24) hours a day / seven (7) days a week. An adequate number of on-site visits by a properly certified operator shall be conducted to ensure proper operation in accordance with the NPDES permit.

5.6.d. Class I systems shall be operated by a Class I or higher operator who shall be on call twenty four (24) hours a day / seven (7) days a week. An adequate number of on-site visits by a properly certified operator shall be conducted to ensure proper operation in accordance with the NPDES permit. If a Class I system is designated as an advanced system, the individual providing adequate coverage in accordance with this section shall have the advanced designation.

5.6.e. Class II, Class III, and IV systems shall be operated on-site at least forty (40) hours per week by an operator with certification equal to or greater than the system classification, unless the Commissioner grants a written exception to this requirement in response to a written request by the system owner. An operator certified at a level equal to or greater than the system classification shall be on call twenty four (24) hours a day / seven (7) days a week. Class II, Class III, and IV systems shall have at least one (1) certified operator (except Class H, Class S, or Class C level) in addition to the Chief Operator. If a Class II or higher system is designated as advanced system, the individual providing adequate coverage in accordance with this section shall have the advanced designation. At all times, adequate operator coverage shall be determined to ensure proper operation in accordance with the NPDES permit.

#### **§64-5-6. Qualifications for Certification.**

6.1. An individual desiring certification shall submit an application for certification to the Commissioner. The application shall be on a form provided by the Commissioner

6.2. Certification of a wastewater operator is based on application, education, a passing score on the applicable certification exam, and in some cases experience as an OIT or higher certified operator.

6.3. Class H, Class S and Class C certifications are not sequential towards OIT and Class I through IV. A Class H, Class S or Class C shall begin with an application for an OIT if he or she wishes to operate at a Class I or higher classification system.

6.4. A person working in a Class I, II, III, or IV system shall begin certification as an OIT.

6.5. Class I through IV certifications are sequential and shall be obtained in order.

6.6. Applicants for certification shall be eighteen (18) years of age or older. This may be waived to a minimum age of sixteen (16) upon written request to the Commissioner and in accordance with Section 7.3.

6.7. Applicants who qualify for Class H, Class S or Class C certification in addition to a current Class I or higher certification shall hold it concurrently but only maintain the renewal requirements for the highest certification held.

6.8. The Commissioner shall charge an initial fee for certification provided as listed in Table 64-5A.

**§64-5-7. Education Requirements.**

7.1. The education requirements for each certification are listed in Table 64-5B.

7.2. Class H education requirements can be waived by the Commissioner, in writing, if the individual agrees to restricted operations.

7.3. OIT education requirements can be waived by the Commissioner, in writing, to completion of the tenth (10<sup>th</sup>) grade. Minimum requirements are verification each semester the student is currently attending school and maintaining a 2.0 average on a 4.0 scale towards graduation requirements. Failure to meet the above requirements shall be grounds for revocation of the certificate.

7.4. Education requirements can be waived by Commissioner, in writing, to actively working towards a GED. Minimum requirements are verification each semester that the student is currently enrolled in an adult education program and completing graduation requirements. Failure to meet the above requirements shall be grounds for revocation of the certificate.

7.5. The number of CEUs credited for courses and operating experience, are in Table 64-5C of this rule.

7.6. All education courses for CEU shall be evaluated by the Commissioner. One hundred percent (100%) credit shall be awarded for those deemed to be directly related to wastewater treatment and collection (examples are mathematics, science, computer, engineering and business courses). If the Commissioner deems the course not directly related, fifty percent (50%) credit shall be awarded.

7.7. Class III and IV applicants may substitute up to half of the required CEU education as specified in Table 64-5B of this rule with additional experience upon written request to the Commissioner.

7.7.a. An applicant cannot use experience used as a substitute for educational requirement to also satisfy experience requirements.

7.7.b. An applicant may use the Class H, Class S, Class C, Class I, Class II, and advanced courses towards the educational requirements for a Class III or higher class level

certificate.

**§64-5-8. Experience Requirements.**

8.1. The experience requirements for each classification are listed in Table 64-5B of this rule.

8.2 Only experience obtained as a valid certified wastewater operator shall count towards experience required for the purposes of this rule.

8.3. Experience as an operator should be predominantly “hands-on” or necessary skills, knowledge, ability, and judgment acquired from daily operating experience rather than from text book study or supervisory observation. It means the individual has actually operated a wastewater treatment plant or worked in the collection system and has performed tasks including, but not limited to, routine tests, sample collection, completion of operational reports, calculations of chemical dosages and subsequent adjustment of chemical feeders or backwashed filters.

8.4. Experience obtained exclusively in collection, maintenance, and other non operational/treatment duties shall not count more than six hundred (600) hours of the total experience required for Class I through IV certification.

8.5. Experience obtained exclusively in laboratory duties shall not count more than one thousand (1,000) hours of the total experience required for Class I through IV certification.

8.6. An applicant may substitute the experience requirements with education and training as specified below:

8.6.a. Class II, III and IV applicants may substitute up to half of the required experience with additional education upon written request to the Commissioner.

8.6.b. An applicant cannot use education used as a substitute for experience requirements to satisfy education requirements.

**§64-5-9. Examination Requirements.**

9.1. Examination requirements for each certification are listed in Table 64-5B.

9.2. Examinations shall not be administered until the Commissioner-approved certification course requirements are first met, unless the Commissioner grants a written exception based on a written request.

9.3. An applicant for operator certification shall submit an application for examination in a form and manner approved by the Commissioner with proof of education and, if required, separate proof of work experience.

9.4. The Commissioner shall schedule examinations for wastewater operator certification

applicants meeting the requirements and notify them before the examination date.

9.5. An individual shall make a score of seventy percent (70%) or better on the examination in order to be considered a passing grade.

9.6. The results of certification examinations are valid for five (5) years. If the applicant has not met the requirements for education, experience, or both within those five (5) years, the applicant shall reapply for examination.

9.7. Applicants who fail an examination shall wait a minimum of sixty (60) calendar days from the date they took the examination before reapplying for the examination.

**§64-5-10. Renewal Requirements.**

10.1. Ensure renewal applications are submitted at least thirty (30) calendar days before the expiration date and no earlier than sixty (60) calendar days prior to expiration in a manner and form approved by the Commissioner.

10.2. The Commissioner shall approve continuing education hour (CEH) courses based on their relevance to wastewater systems.

10.3. The number of CEHs required by each classification each renewal period as follows:

10.3.a. Class S: three (3) CEHs

10.3.b. Class C: six (6) CEHs

10.3.c. OIT: six (6) CEHs

10.3.d. Class I and II: twelve (12) CEHs

10.3.e. Class III and IV: twenty four (24) CEHs

10.3.f. Class H and advanced designation does not require CEHs.

10.4. CEHs cannot be repeated in consecutive renewal periods.

10.5. Operators shall not carry over additional CEHs completed during the two (2) year period to satisfy the CEH requirements for the next certification renewal period.

10.6. The Commissioner may grant extensions upon written request by the applicant.

10.7. The Commissioner may specify certain courses an operator shall attend in order to qualify for renewal.

10.8. The Commissioner shall charge a renewal fee for certification provided as listed in Table 64-5A.

**§64-5-11. Expiration.**

11.1. All wastewater operator certifications expire two (2) years from the date of issuance. An individual with expired certification shall not operate a wastewater system in West Virginia.

11.2. An applicant seeking reinstatement of his or her previous certification shall pass the examination at the certification level previously held if their certification has been expired for more than one (1) year.

11.3. Advanced designation of an individual does not expire.

11.4. If an individual holds a Class H, Class S or Class C in addition to a Class I or higher certification, the Class H, Class S or Class C shall not expire so long as the Class I or higher is properly maintained.

**§64-5-12. Grandfathering.**

12.1. The below specifications only apply to grandfathering or facilitated implementation of the newly revised rule to currently certified operators.

12.1.a. Individuals operating Class H systems approved by WVDEP as of the effective date of this rule shall apply to the Commissioner for restricted Class H (Class HR) or Class H certification within one (1) year of the rule change. The application shall document Class H system(s) operated by the individual prior to the effective date of this rule at a minimum. Class HR shall be given to individuals operating their own home system(s).

12.1.b. Current 1S certificates as of the effective date of this rule shall expire October 31<sup>st</sup> two (2) years after the effective date of this rule and be referred to herein as Class S.

12.1.c. 1C certificates issued prior to the effective date of this rule shall expire one (1) year from the effective date of this rule and be referred to herein as Class C.

12.1.d. Current OIT certificates as of the effective date of this rule shall expire in accordance with the terms of the current certificate (one year from date of issuance).

12.1.e. Current Class I certificates as of the effective date of this rule shall expire April 30<sup>th</sup> two (2) years after the effective date of this rule.

12.1.f. Current Class II certificates as of the effective date of this rule shall expire July 31<sup>th</sup> two (2) years after the effective date of this rule.

12.1.g. Current Class III and IV certificates as of the effective date of this rule shall expire in accordance with the terms of the current certificate (three years from date of issuance).

12.1.h. Upon designation as advanced in accordance with this rule, operators currently employed at advanced wastewater systems classified under this rule shall take an approved

advanced course and pass the exam within three (3) years of the effective date of this rule to be grandfathered as an advanced certified operator.

12.1.i. Approved CEH courses taken by individuals within one (1) year prior to the effective date of this rule shall be applied to the first renewal period under the effective date of this rule.

**§64-5-13. Certification from Another Jurisdiction.**

13.1. The Commissioner shall grant certification to a wastewater operator certified by another jurisdiction, if the applicant:

13.1.a. Is actively seeking, has been offered or has accepted employment in West Virginia which requires a certified operator;

13.1.b. Submits a completed application in a manner and form approved by the Commissioner;

13.1.c. Meets the educational and work experience requirements of this rule; and,

13.1.d. Passes the West Virginia certification examination equivalent to the certification level of the other jurisdiction, as determined by the Commissioner.

**§64-5-14. Suspension and Revocation.**

14.1. The Commissioner may suspend or revoke the certification of an operator if the individual:

14.1.a. Used fraud or deceit in obtaining certification;

14.1.b. Failed to comply with this rule;

14.1.c. Performed the duties of a wastewater operator in a negligent or incompetent manner;

14.1.d. Knowingly or negligently submitted misleading, inaccurate, or false reports to the Commissioner; or

14.1.e. Violated or caused to be violated, any portion of DEP's legislative rule, NPDES Program, 47CSR10, or the U.S. Clean Water Act.

14.2. The Commissioner shall notify the certified operator and the employer via certified mail of a proposed suspension or revocation. The notification shall set forth the action proposed, the effective date, the reason, and the length of time of the proposed action.

14.3. The suspension of an operator's certification is effective for an initial period of not more than one (1) year, during which time the certification is not valid and the individual cannot

operate a wastewater system. The individual shall obtain the CEHs required for that certification level, as if the suspension had not occurred.

14.4. The revocation of an operator's certification is for a period of not less than one (1) year during which time the certification is not valid and the individual cannot operate a wastewater system. After the period of ineligibility (caused by the revocation) has expired, the formerly certified operator shall pass the examination at the certification level previously held at a minimum to regain certification.

**§64-5-15. Penalties.**

15.1. 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.

15.2. A person who violates any provision of this rule or any rules or orders of the Bureau for Public Health is guilty of a misdemeanor and shall, upon conviction, be punished by a fine of not more than five hundred dollars (\$500), as provided under W.Va. Code §16-1-18. Each day there is a failure to comply with a provision of this rule is a separate offense.

**§64-5-16. Administrative Due Process.**

16.1. Those persons adversely affected by the enforcement of this rule may request a contested case hearing in accordance with Rules of Procedures for Contested Case Hearings and Declaratory Rulings (64CSR1).

**Table 64-5A  
FEES**

<b>Type</b>	<b>Amount</b>
Class HR Initial and Renewal	No Fee
Class H Initial and Renewal	\$100
Class S Initial and Renewal	\$100
Class C Initial and Renewal	\$100
OIT Initial and Renewal	No Fee
Class I Initial and Renewal	\$125
Class II Initial and Renewal	\$150
Class III Initial and Renewal	\$175
Class IV Initial and Renewal	\$200
Advanced Designation	No Fee
Renewal Late Fee	\$25

Note: Individuals who hold multiple wastewater operator certifications shall pay the initial fee for each and only the renewal fee associated with the highest level certification held thereafter.

**Table 64-5B  
OPERATOR EDUCATION AND EXPERIENCE REQUIREMENTS**

<b>Class</b>	<b>Education</b>	<b>Experience</b>
Class H	HS diploma or GED*, Commissioner-approved certification course & passing the Class H exam.	None
Class S	HS diploma or GED, Commissioner-approved certification course & passing the Class S exam.	None
Class C	HS diploma or GED, Commissioner-approved certification course & passing the Class C exam.	None
OIT	HS diploma or GED.*	None
Class I	HS diploma or GED, Commissioner-approved certification course & passing the Class I exam.	Two thousand (2,000) hours (1 year full-time) wastewater system experience as an OIT.**
Class II	HS diploma or GED, Commissioner-approved certification course & passing the Class II exam.	Four thousand (4,000) hours (2 years full- time) wastewater system experience at a Class I or higher class level wastewater system as a Class I operator.**
Class III	HS diploma or GED, ninety (90) CEUs* & passing the Class III exam.	Eight thousand (8,000) hours (4 years full- time) wastewater system experience, 2,000 of which shall be at a Class II or higher class level wastewater system as a Class II operator.**
Class IV	HS diploma or GED, one hundred eighty (180) CEUs* & passing the Class IV exam.	Ten thousand (10,000) hours (5 years full- time) wastewater system experience, at least 4,000 of which shall be at a Class III or higher class level wastewater system as a Class III operator.**
Advanced	Commissioner-approved training course & passing the Advanced exam.	None

\* and \*\* Refer to Sections 7, 8, and 9.

**Table 64-5C**  
**CEUs FOR COURSES AND OPERATING EXPERIENCE**

Ten (10) CEHs	1 CEU
One (1) College Semester Credit Hour	1.5 CEUs
One (1) College Quarter Credit Hour	1 CEU
Two thousand (2,000) hours of experience	45 CEUs

Note Section 7.6.