Chapter 531. REGULATIONS FOR WASTEWATER OPERATOR CERTIFICATION

SUMMARY. These rules establish the criteria that a person must meet in order to be certified as an operator of a wastewater treatment plant. Treatment plants are classified as Grades I-V Biological Treatment, Grade I-III Physical/Chemical Treatment, or Spray Irrigation Treatment System according to population equivalents or type of treatment. Certification for each operator Grade I-V Biological, Grade I-III Physical/Chemical or Small or Large Spray Irrigation Treatment Systems is based on education and experience. There are provisions for substituting education for experience as well as certain work experience for actual treatment plant experience.

1. General Conditions

- **A. Applicability.** A person who is an operator of a wastewater treatment plant which requires a certified operator under the provisions of Title 32, MRSA, Chapter 62, is subject to these rules.
- **B.** Contract Operators. A proposed contract for facility operation by any firm or individual must be approved by the Maine Department of Environmental Protection (Department) within 2 weeks of the contractor being retained by the permittee. The guidelines for the review of operational contracts are available upon request.
- C. Provisional Certification. Graduates of the New England Regional Wastewater Institute at Southern Maine Vocational Technical Institute, South Portland, Maine (now Southern Maine Community College); the Environmental Technology Course at Eastern Maine Vocational Technical Institute, Bangor, Maine (now Eastern Maine Community College); or other equivalent programs, are eligible for Grade III or lower examination and certification. The examination must be as administered by the Department. Such certification shall be provisional pending successful completion of one year of work experience in a Grade II or higher treatment facility under the direct supervision of a fully certified operator. Following this year, a full certificate may be requested. The Department shall then evaluate the quality of the work experience. This evaluation must determine the operators overall proficiency in operations and maintenance of wastewater treatment systems, process control, laboratory procedures and sludge handling processes. If satisfactory, a full certificate will be awarded. This provisional upgrade must be requested, it is not automatic.
- **D.** Applicability to Professional Engineers. Violation of 32 M.R.S.A. §§4171 4182, Sewage Treatment Operators, by an operators who is a registered professional engineers will be reported to the Maine State Board of Registration for Professional Engineers.
- **E. Display of Certificate.** The wastewater treatment plant operator's certificate issued by the Department must be displayed in a prominent location at the operator's place of work.
- **F.** Qualification to Operate Plants by Grade. A wastewater treatment plant operator, unless qualifying under 32 MRSA § 4177, who is certified by the Department is considered qualified to operate a plant grade equal to or lower than the certificate grade. An operators qualified under 32 MRSA § 4177 is only permitted to operate the plant in which he or she was employed at the time the certificate was issued.

2. Classification of Wastewater Treatment Plants

A. Classification of Biological Treatment Plants. A biological wastewater treatment plant is classified on a population equivalent (P.E.) of 0.2 lbs. of Biochemical Oxygen Demand (BOD) and 100 gallons per person per day. The treatment plant design capacity will be the major classification criteria in determining such population equivalent. Plant grade will be determined on the following basis except as noted in Section 2(C).

	Secondary-	Advanced	Other Defined
Size (P.E.)	Biological	Treatment*	Treatment**
Up to 5,000	II	III	I
5,000 to 15,000	III	IV	II
15,000 to 50,000	IV	V	III
50,000 and over	V	V	IV

^{*}Advanced treatment includes one or more of the following.

- 1. Advanced biological/chemical methods;
- 2. Ion Exchange, Reverse Osmosis or Electrodialysis; or,
- 3. Chemical recovery or Carbon regeneration.

- 1. Separate sludge digestion with gas collection; or,
- 2. Mechanical sludge dewatering or sludge incineration.
- **B.** Classification of Physical/Chemical Treatment Plants. A physical/chemical treatment plants is classified by the Department following a standard evaluation of the facility. These facilities will be classified as Grades I, II, or III.
- **C.** Classification of Spray Irrigation Treatment Plants. A treatment system including one or more stabilization ponds followed by spray irrigation with no direct discharge to a surface water body is classified as Spray Irrigation Treatment Systems (SITS).
 - 1. A Spray Irrigation Treatment System used to treat only domestic sanitary wastewater having a spray irrigation site size of 10 acres or less is classified as Grade I Spray Irrigation Systems (SITS-I)
 - 2. All other Spray Irrigation Treatment Systems are classified as Grade 2 Spray Irrigation Systems (SITS-II).
- **D.** Upgrade of Downgrade of Plant Classification. The Department may upgrade or downgrade individual plants if, in its opinion, the complexity of the plant and degree of skill required for its operation are not properly accounted for in the above categories.

^{**}Other defined treatment includes one or more of the following.

3. Requirements For Certification

- **A. Operator Grades** Five grades of biological treatment system operators, three grades of physical/chemical treatment system operators and two grades of Spray Irrigation Treatment System operators are established to parallel the previously described classification of wastewater treatment plants. A Grade I certified operator is considered qualified to supervise the operation of a Grade I plant; a Grade V certified operator is considered qualified to supervise the operation of Grade V or lower plants. A person certified to operate a Spray Irrigation Treatment Systems is considered qualified to supervise and operate only systems meeting the criteria established by the Department. A person currently certified to operate a Grade II biological treatment system or higher may operate a Spray Irrigation Treatment System without obtaining additional certification.
- **B.** Qualifications for Certification. Each applicant shall satisfy the experience requirements for the grade of certification requested. Education may be substituted for experience as set forth below. Educational substitutions will be based on the following.
 - (1) High school education or equivalent is credited for two years of experience.
 - (2) Post high school education in approved areas of engineering, science and/or related fields. 30 semester hours, or equivalent, equals 1 year.
 - (3) Specialized training courses will be evaluated on the basis of training credits; six classroom hours of approved courses equals one credit, 45 credits equals one year. Examples. 36 hour course = 6 credits; Sacramento Course = 15 credits per volume.
 - (4) A person attending a course approved by the Department where attendance credit is given in Continuing Education Units (C.E.U.s) is credited with 10 training hours for each C.E.U. earned.
 - (5) All experience or education submitted in support of applications that is not specified in this section shall be evaluated on an individual basis.
- **C. Examination Requirement.** Qualifying examinations are required of all applicants for certification. Persons holding valid certificates in other states may be certified at a comparable grade level without examination, providing all other requirements are met. The applicant must have passed a written examination in the other state before reciprocity can be granted. The other state must also grant reciprocity to operators certified by the State of Maine.
- **D. Types of Certificates.** Certificates will be issued attesting to the holder's ability to operate one or more of three general types of treatment systems.
 - B = Systems utilizing biological means of treatment;
 - P/C = Systems utilizing physical or chemical means of treatment; or,
 - SITS = Systems using spray irrigation as the means of treatment.

A certificate authorizes the holder to operate only that type system for which the certificate was issued.

E. General Requirements and Definitions

- (1) An applicant for a certificate is required to pass an examination for that grade.
- (2) Work experience in a treatment plant is defined as that gained in actual performance of important operating functions within any wastewater treatment facility.
- (3) Work experience in a related field includes activities such as plant operation, pilot studies, design, planning, wastewater treatment plant construction, related laboratory work. Activities must be of a kind related to the type of treatment process indicated in the application.
- (4) See Section 3(B) for educational substitutions. High school education is not considered related education for certification purposes.

(5) Grade I Operator

The applicant for this grade shall submit satisfactory evidence of graduation from high school or at least two years experience operating a wastewater treatment plant.

(6) Grade II Operator

- (A) The applicant for this grade shall submit satisfactory evidence of at least four years experience in a wastewater treatment plant. Education may be substituted for no more than three years of experience; or
- (B) Submit satisfactory evidence of three years of related education and one year of related work experience.

(7) Grade III Operator

- (A) The applicant for this grade shall submit satisfactory evidence of at least five years experience in a wastewater treatment plant. Education may be substituted for no more than three years of experience; or
- (B) Submit satisfactory evidence of at least three years of related education and two years of related work experience.

(8) Grade IV Operator

- (A) The applicant for this grade shall submit satisfactory evidence of at least six years experience in a wastewater treatment plant, three years of which must have been as operator of a Grade II or higher plant. Education may be substituted for no more than three years of experience; or
- (B) Submit satisfactory evidence of at least four years of related education and three years of work experience at a Grade II or higher plant.

(9) Grade V Operator

- (A) The applicant for this grade shall submit satisfactory evidence of at least eight years experience in a wastewater treatment plant, four years of which must have been as operator of a Grade III or higher plant. Education may be substituted for no more than four years of experience; or
- (B) Submit satisfactory evidence of at least four years of related education and four years of work experience at a Grade III or higher plant.

(10) Grade SITS - I and Grade SITS - II Operator

The applicant for this grade shall submit satisfactory evidence of graduation from high school or at least two years experience operating a Small Spray Irrigation treatment system.

F. Advanced Treatment Examination. In addition to satisfying the minimum requirements for operating plants of the appropriate grade level, the operators of an advanced treatment plants must demonstrate by passing an examination approved by the Department, that he or she possesses special knowledge of advanced wastewater treatment. Applicants passing such examinations will be awarded certificates so indicating.

4. Certification Procedure

- **A. Application Requirements.** A candidate for a wastewater treatment plant operator's certificate shall complete an application as furnished by the Department. The notarized application, with appropriate fee, must be forwarded to the address specified by the Department. A completed applications with all supporting documentation must be received at least six weeks prior to the examination date. Applications received after the published application date will be held for the next examination period.
- **B.** Application Process. An applicant having the necessary qualifications, as set forth in Section 3, for initial certification or for upgrading present classification, will be notified of the scheduled time and place of examination. An applicant not possessing the necessary qualifications for the requested grade will be allowed to reapply for a lower grade as qualified based on his or her education and experience. An applicant may be examined up to three months prior to being fully qualified for the desired grade.
- **C. Reexamination.** In the event that an applicant fails to pass an examination, the applicant may be re-examined in the same or lower grade at the next scheduled examination.
- **D. Training Requirement.** The Department shall issue a permanent certificate indicating the classification level of treatment system for which the individual is qualified to act as operator. Certification must be renewed on a biennial basis. Certificate holders with a Grade I-V Biological Wastewater Treatment Plant Operator Certificate, a Grade I-III Physical/Chemical Wastewater Treatment Plant Operator Certificate, or a SITS-II Spray Irrigation Treatment System Operator Certificate shall be required to show proof of completion of at least 18 clock hours of training during the period that his or her current certificate was in effect before the certificate may be renewed for the next biennial period. No more than 6 hours of safety training may be used to comply with this requirement. A certificate holder with SS-1 Spray Irrigation

Treatment System Operator Certificate is required to show proof of completion of at least 6 clock hours of training during the period that their current certificate was in effect before the certificate may be renewed for the next biennial period. The Department may require an operator who performs permit compliance laboratory work in a facility and who does not adequately demonstrate proper sampling and analysis procedures and techniques during regular compliance inspections to attend additional approved laboratory training. This training must be approved by the Bureau of Land and Water Quality. A list of approved courses is available upon request.

E. Maintenance of Current Address. Each certificate holder shall be responsible for maintaining a current address on file with the Bureau of Land and Water Quality. Address changes must be submitted to this Bureau at least two months prior to the expiration of the current renewal period. This certificate will be valid continuously when biennial renewal requirements are satisfied prior to the expiration of the current renewal period, unless otherwise revoked as provided by 32 M.R.S.A. §4175.

5. Failure To Renew; Reinstatement

- **A. Failure to Renew.** A certificate which is not renewed by the deadline for renewal becomes inactive. No person, firm or corporation, either municipal or private, may rely on an inactive certificate to satisfy the requirement of 32 M.R.S.A. §4181.
- **B.** Reactivation within Six Months of inactivation. A certificate holder who allows his or her certificates to lapse shall be reinstated if he or she pays an appropriate administrative fee and shows proof of completion of the clock hours of approved training required in Section 4(D) during the period from two years before to six months after the renewal deadline.
- **C.** Reactivation after Six Months of inactivation. A certificate that has been inactive for more than six months but less than two years may be reinstated if the certificate holder pays an appropriate administrative fee and meets all the requirements for initial certification specified in Section 3. However, the Department-may, in its discretion, waive the examination requirement, if it finds that the holder of the certificate has performed his or her duties satisfactorily and in a manner that demonstrates that an examination is not necessary.
- **D.** Loss of Certification. A certificate holders who allows his or her certificates to remain inactive for two years or longer shall be removed from the master list of certified operators as maintained by the Department. A certificate holder whose name has been so deleted is-required to submit an application for initial certification and examination to be certified in the future.

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