

**WASTEWATER TREATMENT PLANT OPERATOR
CERTIFICATION**

For certification rules and regulations please refer to NWEA's Policies & Procedures which can be accessed online at www.nvwea.org.

I. Definitions

“**Program Administrator**” is a contracted position overseen by the Board to perform certification activities.

“**Assistant Supervisor**” means a person in direct responsible charge of operations in the absence of the supervisor.

“**Board**” means the Nevada Water Environment Association Certification Board.

“**Certificate**” means a certificate of competency issued by the State of Nevada stating that the Wastewater Treatment Operator has met the requirements of a specific operator classification. It specifies the name and grade of the person certified, as well as the date the certificate was issued.

“**Continuing Education Unit (CEU)**” = 10 contact hours.

“**Full Time or Equivalent (FTE)**” = qualifying experience.

“**NAC**” means the Nevada Administrative Code.

“**NRS**” means the Nevada Revised Statutes.

“**Operator**” means any person, other than a supervisor or assistant supervisor, who is working as an operator of a plant for sewage treatment.

“**Operator in Training (OIT)**” means a person who has passed the Grade I exam but has not yet met the education and/or experience requirements to be certified as a Grade I Operator.

“**Responsible Charge**” means a person responsible for all activities associated with treatment plant operations and compliance with all applicable provisions of NRS and NAC relating to operations of such plant.

“**Rules and Regulations**” means rules, regulations, and policy for certification of the treatment plant operators.

“**Supervisor**” means a person in direct responsible charge of the plant's treatment operation.

“**Wastewater Treatment Plant**” (Water Pollution Control Plant) means a group or assemblage of structures, equipment and processes which treat or condition wastewater, affecting its physical, chemical, or bacteriological quality.

II. Treatment Plant Classifications

Treatment Process	Plant Capacity (MGD)					
	0-0.1	0.11-1.0	1.1-5.0	5.1-10.0	10.1-20.0	>20.0
Stabilization Pond	I	I	I	I	II	III
Primary	I	I	II	III	III	IV
Biofiltration	II	II	III	III	IV	IV
Activated Sludge	III	III	III	IV	IV	IV
Tertiary and Reuse	III	III	IV	IV	IV	IV

III. Minimum Grades of Operator Certification

Operator Duties	Plant Classification			
	I	II	III	IV
Supervisor	Grade I	Grade II	Grade III	Grade IV
Assistant Supervisor	Grade I	Grade I	Grade II	Grade III
Operator	Grade I	Grade I	Grade I	Grade I

Any person, other than a supervisor or assistant supervisor, who is working as an operator of a plant for sewage treatment must be certified as at least a Grade I operator of a plant for sewage treatment, or obtain such certification within one (1) year after the date on which he begins his employment at the plant for sewage treatment as such an operator.

IV. Experience and Education Requirements

Grade	Education & Certification	Experience*
1	High School or equivalent & 6 CEUs (see Section XIV)	1 year full-time or equivalent (FTE)
2	Grade I Certification	2 years FTE
3	Grade II Certification	3 years FTE
4	Grade III Certification	4 years FTE

*Wastewater Treatment Plant Operator experience includes time spent performing wastewater treatment plant operational duties.

In addition to the above requirements, the applicant must pass a written examination at each grade level.

V. Operator in Training

An individual may take the Grade I exam without first meeting the required education and/or experience requirements. Upon passing the exam, the individual will be issued an Operator in Training (OIT) certificate. The OIT certificate may be renewed every two (2)

years. When the OIT has met all of the requirements for the Grade I, the individual may submit documentation of having met said requirements to the Board. Upon approval of the documentation, the OIT certificate will be converted to a Grade I certificate that expires on the date the OIT certificate previously did.

VI. How to Apply for Certification

To apply for certification, an applicant needs to submit a completed application form and a \$60 nonrefundable fee to the Nevada Division of Environmental Protection. Applications must be postmarked no later than 30 days prior to the posted examination date. Upon approval of the application, the applicant will be notified of the approval and the available examination dates and locations. The Board reserves the right to deny an application for certification if the Board determines that any requirement for such certification is not met. A fee of \$25 may be charged to any person whose check is returned because of a lack of funds.

VII. Certification Exam

The Board will hold examinations at times and places throughout the year as may be required and convenient to the applicants. Computerized exams are available anytime at locations in Nevada and nationwide for an additional fee of \$64. In the event an applicant fails to pass an examination, the applicant may apply for re-examination upon submission of a new application and filing fee. Applicants for certification will be required to pass a written examination to demonstrate their knowledge in the following areas:

GRADE I

Basic principles and methods of wastewater treatment and specific knowledge of the procedures involved in operating and maintaining stabilization ponds and primary treatment plants.

GRADE II

Record-keeping and interpretation; reporting and specific knowledge about functions of plant components; normal performance characteristics for commonly used primary and secondary treatment processes; chlorination; routine service and care of equipment; routine tests for evaluation of plant performance; and plant and personnel safety procedures.

GRADE III

Specific knowledge relating to design applications, operations, control, and calculations involved in treating waste by the primary treatment and biofiltration methods; various modifications of the activated sludge process; basic knowledge of the principles of tertiary treatment; and basic knowledge of solids handling, conditioning and disposal.

GRADE IV

Specific knowledge relating to design applications, operations, control, and calculations involved in treating wastes by the primary treatment and biofiltration methods; various modifications of the activated sludge process; a working knowledge of tertiary treatment and the various types utilized; solids handling, conditioning and disposal; and a working knowledge of the principles of industrial waste and pretreatment programs.

VIII. Reciprocity with Other States

Reciprocity will be considered from applicants holding valid certificates from all certification programs in the United States and

Canada. The applicant must meet all current education and experience requirements. Upon approval of the applicant's qualifications, reciprocity will be granted one grade lower than the equivalent grade currently held by the applicant, with the exception that if an applicant currently holds the equivalent of a grade one certification that reciprocity will be granted at grade one.

If an applicant has received certification directly from the Association of Boards of Certification reciprocity will be granted as follows: 1) They must hold a valid certificate that was issued by the Association of Boards of Certification. 2) The applicant must meet all current education and experience requirements. 3) Upon approval of the applicant's qualifications, reciprocity will be granted at the equivalent grade currently held by the applicant.

Reciprocity will be considered on a case by case basis from applicants holding valid certificates from certification programs located outside of the United States and Canada.

Certificates issued by reciprocity will be designated as such.

The fee for reciprocity is \$75.

IX. Certificate Renewals

Any certificate issued under the present rules and regulations shall be valid for a period of two (2) years from the date of issuance. Any certificate not renewed after two (2) years becomes automatically suspended. No examination shall be required for renewal, provided that the previous certificate shall not have been invalid for a period of more than one (1) year. The renewal application and renewal fee of \$30 should be sent to the Nevada Division of Environmental Protection for renewal of any Nevada certificate. Any renewal post-marked after the expiration date will be charged a \$20 late fee.

X. Replacement / Duplicate Certificate

Certified operators desiring a replacement or duplicate certificate may obtain such certificate upon payment of a \$20 fee.

XI. Decertification

The State may revoke or refuse to renew the certificate of any operator. All revocation cases will be reviewed by a hearing before the Board of Certification, and a decision will be made by a unanimous vote of the quorum; quorum being five (5) out of seven (7).

A case for decertification may be considered by the Board for, but not limited to, the following:

- 1) The Operator is incompetent or unable to perform his/her duties properly; or
- 2) The Operator has willfully or negligently caused or allowed the technical provisions of the appropriate wastewater discharge requirement to be violated; or
- 3) The Nevada experience and education requirements for wastewater operator certification have not been satisfied; or
- 4) The Operator has practiced fraud or deception; or
- 5) The Operator has failed to renew his/her certificate in accordance with these provisions.

XII. Appeals and Protests

Any appeal or protest made because of the determination of the Program Administrator shall be in writing to the Board Chair. This notification shall be sent within twenty (20) days of receipt of the Administrator's written determination. The Chair shall, within sixty (60) days, make an inquiry of the protest and give an answer in writing. Any appeal of the Board Chair's determination shall be to the Certification Board. Further appeal may be made to the Division of Environmental Protection, whose decision shall be final. Appellant must send the original facts again, and state in writing which part of the Committee's decision he/she deems improper, and why.

XIII. Suggested Study Materials

Suggested ABC Wastewater Treatment Exam References

The following are approved as reference sources for the ABC wastewater treatment examinations. Operators should use the latest edition of these reference sources to prepare for the exam.

California State University, Sacramento (CSUS) Foundation, Office of Water Programs

- Operation of Wastewater Treatment Plants, Volume I and II
- Advanced Waste Treatment
- Manage for Success

To order, contact: Office of Water Programs
California State University, Sacramento
6000 J Street
Sacramento, CA 95819-6025
Web site: www.owp.csus.edu
Phone: (916) 278-6142
Fax: (916) 278-5959
E-mail: wateroffice@owp.csus.edu

National Environmental Training Center for Small Communities (NETCSC)

- Protecting Your Community's Assets: A Guide for Small Wastewater Systems

A PDF version of this guide is available from: www.nesc.wvu.edu/training.cfm

You may also request a printed and bound hard copy of the guide by calling NETCSC at (800) 624 8301, and asking for product TRBKMG03 (shipping and handling charges may apply).

Water Environment Federation

- Operation of Municipal Wastewater Treatment Plants - Manual of Practice No. 11
- Activated Sludge - Manual of Practice OM-9

To order, contact: Water Environment Federation
601 Wythe Street
Alexandria, VA 22314-1994
Web site: www.wef.org
Phone: (800) 666-0206
Fax: (703) 684-2492
E-mail: pubs@wef.org

XIV. Certification Training

Courses directly related to wastewater treatment will receive full value. Courses indirectly related to wastewater treatment will receive one-half value. Directly related short courses, including those given at the Water Quality Control Institute, are equivalent to one CEU per 8-hour day, with a maximum of three CEUs per week. If the course is considered to be indirectly related, one CEU will be given for each two days, with a maximum of two CEUs per week. College courses (including extension and correspondence courses taken for credit) earn 1.5 CEUs per semester credit. Indirectly related courses earn a half-credit. (Half-credit = 0.7 CEU per semester credit)

Directly Related Correspondence Courses

California State University, Sacramento

1. Operation of Wastewater Treatment Plants, Vol. I & II (9 CEUs each)
2. Advanced Waste Treatment (9 CEUs)
3. Small Wastewater System Operation and Maintenance, Vol. I & II (9 CEUs each)
4. Industrial Waste Treatment, Vol. I & II (9 CEUs each)
5. Treatment of Metal Wastestreams (4.5 CEUs)
6. Pretreatment Facility Inspection (9 CEUs)

Certification Training (continued)

7. Operation and Maintenance of Wastewater Collection Systems, Vol. I & II (9 CEUs each)

College Courses Earning Full Credit

(1.5 CEUs per semester credit):

1. College Chemistry - up to 12 CEUs.
2. Mathematics area: Algebra, Geometry, Trigonometry, Statistics - up to 12 CEUs. Does not include basic, introductory, or business math courses.
3. Biological Science area: Microbiology, Pathogenic Bacteriology, etc. - up to 9 CEUs.
4. General Physics - up to 9 CEUs.
5. Engineering courses: Fluid Mechanics, Hydraulics, and Engineering courses not directly related.

College Courses Earning Half Credit

(0.7 CEU per semester credit):

1. Technical Writing - up to 3 CEUs.
2. Public or Business Administration - up to 9 CEUs in the areas of Organization, Management, Finance, Supervision, Budgeting, etc.
3. Public Speaking - up to 3 CEUs.

Courses Accepted by WWET for CEUs

1. One-day training seminars, safety conferences, or NWEA, CWEA, or WEF-sponsored conventions will receive one CEU per day attended, up to 3 CEUs, provided that an education program is offered.
2. Other extension courses or training of any type which might relate to the operator's duties will be evaluated on a case-by-case basis. CEUs will be allowed based on the material covered, the depth of the coverage, and the time required to complete the course.

Other Wastewater Certification Programs available through NWEA:

- Wastewater Quality Analyst
- Industrial Waste Inspector
- Industrial Waste Operator
- Collection System Operator
- Plant Maintenance Technologist

Nevada Wastewater Certification Programs



Wastewater Treatment Plant Operator



State of Nevada
Division of Environmental Protection
NAC 445A.287-292

Wastewater Operator Certification Program
Bureau of Water Pollution Control
Nevada Division of Environmental Protection
901 S. Stewart St., Suite 4001
Carson City, Nevada 89701

CERTIFICATION PROGRAM ADMINISTRATOR
Nevada Water Environment Association

775-465-2045
www.nvwea.org