



NEWEA

**New England
Water Environment
Association**

**WASTEWATER LABORATORY
ANALYST VOLUNTARY
CERTIFICATION PROGRAM**

**VOLUNTARY CERTIFICATION PROGRAM FOR
WASTEWATER LABORATORY ANALYSTS
NEW ENGLAND WATER ENVIRONMENT ASSOCIATION, INC.**

**GENERAL INFORMATION
SECTIONS 1-8**

1.0 OBJECTIVE

This program, for the examination and certification of wastewater laboratory analysts in the New England States, is hereby established in order to promote the employment of trained, experienced, reliable and efficient personnel for the operation of public and industrial wastewater works; and to establish standards whereby wastewater laboratory analysts can demonstrate proficiency. By means of this program, the New England Water Environment Association, Inc., will strive to:

- a) Improve the quality of wastewater laboratory operations;
- b) Improve the status of wastewater laboratory analysts;
- c) Promote safety conditions for wastewater laboratory analysts;
- d) Provide a roster of qualified analysts; and
- e) Provide a means whereby those responsible for employment of wastewater laboratory analysts can readily determine the qualifications that are considered desirable in such personnel.

2.0 GENERAL POLICIES

- 2.1** This is a voluntary program. It will be unnecessary for any person to hold membership in the NEWEA or in any other organization or association to receive certification, provided that said person meets the requirements set forth herein.
- 2.2** All wastewater laboratory analysts are encouraged to: a) apply for certification; and to b) strive for increased knowledge, training and experience to permit future advancement in their grade of certification.
- 2.3** This program provides for certification of personnel whose duties are confined to work, or supervision of work in: a) wastewater laboratories; or b) analytical laboratories that test wastewater samples.
- 2.4** The NEWEA will endeavor to cooperate with, and request the cooperation of those State, Municipal, Civil Service, Industrial, and Institutional agencies in New England which own, operate or exercise control over wastewater laboratories, to the end that the maximum benefits of the Program may be realized throughout the New England States.

3.0 DEFINITIONS

- 3.1** Wastewater laboratory – Shall mean any facility that performs any testing for process control or regulatory reporting.
- 3.2** Laboratory analyst – Shall mean any person that performs any test or analysis or supervises testing or analysis for process control or regulatory reporting.
- 3.3** Certification – Shall mean Wastewater Laboratory Analyst Voluntary Certification.
- 3.4** Committee – Shall mean the NEWEA Laboratory Practices Committee

4.0 GENERAL PROCEDURES

- 4.1** Application for certification shall be made to any member of the Committee on forms to be prescribed by the Committee. Applications shall be submitted a reasonable time in advance of date of examination established by the Committee. Applications will be given preliminary screening, by any Committee member, to ascertain whether the applicant meets the education and experience requirements. Applicants possessing the necessary education and experience who are applying for examination for certification will be notified of the scheduled time and place of examination. Applicants not possessing the necessary requirements will be so advised and will be urged to re-apply.
- 4.2** Certificates provided herein will be issued by the Committee only after applicants have fully qualified themselves in accordance with the provisions of this program.

5.0 EXAMINATION

- 5.1** The Committee shall prepare such written examinations as to properly reflect the knowledge and ability required of the laboratory analyst as herein provided.
- 5.2** The Committee may hold examination periods at the time and place of the annual meetings of NEWEA and at such other times and places throughout the year as may be required and convenient. The time and place of examinations may be announced in the NEWEA Newsletter, or by such other methods as the Committee may deem necessary and proper.
- 5.3** The passing grade on all examinations shall be a minimum of 70%.
- 5.4** In the event an applicant fails to pass an examination, he/she may apply for re-examination after six months. The normal \$50.00 fee must accompany the application.
- 5.5** The Committee may, at its discretion, waive examination for applicants holding certificates or licenses issued by other states or associations having equivalent standards, as determined by the Committee.

6.0 ISSUANCE OF CERTIFICATES

- 6.1** Upon satisfactory fulfillment of the requirements provided herein, the Committee shall issue a suitable certificate on behalf of the New England Water Environment Association, Inc.
- 6.2** Certificates will be permanent upon successful completion of the requirements unless revoked for proper cause.
- 6.3** The Committee is authorized to revoke the certificate of any person who, after a hearing before the Committee, shall be found guilty of fraud or deceit in obtaining a certificate, or of gross negligence, incompetency or misconduct in the performance of their duties as a laboratory analyst.

7.0 FEES FOR CERTIFICATION

- 7.1** Fees for certification in each grade shall be \$50.00 payable to the New England Water Environment Association.
- 7.2** Fees shall accompany all applications for certificates.
- 7.3** Fees for all applicants whose applications are rejected, or who fail to pass the examination will not be returned.

7.4 The fee as listed here may be revised, if it is found necessary, to make the Wastewater Laboratory Analyst Certification Program self-sustaining, provided that the Executive Committee of NEWEA gives its approval.

8.0 QUALIFICATION OF WASTEWATER LABORATORY PERSONNEL

8.1 Two grades of laboratory analyst certification are hereby established.

- Lab Analyst I
- Lab Analyst II

8.2 All applicants shall meet the following general requirements:

- a) Be able to read and write the English language; and
- b) Be able to maintain desirable logs and records of sampling, testing, and maintenance in a laboratory.

8.3 All applicants must have a minimum of a High School diploma or GED, or equivalent.

8.4 Laboratory Analyst I – All applicants for this grade must submit satisfactory evidence of a least one year's experience in conducting or supervising wastewater analyses and pass a Grade I examination.

8.5 Laboratory Analyst II – All applicants for this grade must submit satisfactory evidence of at least three years' experience in conducting or supervising wastewater analyses and pass a Grade II examination.

An Associate's Degree in a physical or biological science may be substituted for one year of experience. A Bachelor's Degree in a physical or biological science may be substituted for two years of experience.

Wastewater Laboratory Analyst Certification Examination

Examination: The test is a one-hundred question, multiple-choice examination.

The use of a non-programmable calculator is allowed.

Laboratory Analyst I

Topics Covered: pH

Total & Volatile Suspended Solids
Total & Volatile Solids
BOD
Dissolved Oxygen
Fecal Coliform/E. Coli
Settleable Solids
Temperature
Laboratory Safety
Chlorine Residual
Sampling Techniques, Preservation, & Holding
Times
Record Keeping

Laboratory Analyst II

Topics Covered: All those listed for Laboratory Analyst I

Turbidity
COD
Ammonia
Phosphorous
Oil & Grease
Microbiology of Activated Sludge
Principles of Supervision
Quality Control
Chemical Hygiene Plan

Suggested References

The following resources may be used to obtain study materials:

Office of Water Programs
California State University, Sacramento
6000 J Street
Sacramento, CA 95819-6025
Telephone: (916) 278-6142
Fax: (916) 278-5959
Email: wateroffice@owp.csus.edu
<http://www.owp.csus.edu>

Water Environment Federation
601 Wythe Street
Alexandria, VA 22314-1994
Telephone: (800) 666-0206
Fax: (703) 684-2492
Email: pubs@wef.org
<http://www.wef.org>