ARTICLE 33-19 CERTIFICATION OF WATER AND WASTEWATER SYSTEMS OPERATORS

Chapter 33-19-01

Certification of Water Treatment Facility Operators, Water Distribution and Storage System Operators, Wastewater Treatment Facility Operators, and Wastewater Collection and Transfer System Operators

CHAPTER 33-19-01

CERTIFICATION OF WATER TREATMENT FACILITY OPERATORS, WATER DISTRIBUTION AND STORAGE SYSTEM OPERATORS, WASTEWATER TREATMENT FACILITY OPERATORS, AND WASTEWATER COLLECTION AND TRANSFER SYSTEM OPERATORS

Section

- 33-19-01-01 Responsibility
- 33-19-01-02 Definitions
- 33-19-01-03 General
- 33-19-01-04 Application for Certification
- 33-19-01-05 Examinations
- 33-19-01-06 Fees for Certification
- 33-19-01-07 Issuance of Certificates
- 33-19-01-08 Water Treatment Facility Classifications
- 33-19-01-08.1 Water Distribution and Storage System Classifications
- 33-19-01-09 Wastewater Treatment Facility Classifications
- 33-19-01-09.1 Wastewater Collection and Transfer System Classifications
- 33-19-01-10 Change of Classification
- 33-19-01-11 Certification Requirements
- 33-19-01-12 Operator Qualifications
- 33-19-01-13 Water Distribution System Operator Qualifications [Repealed]
- 33-19-01-14 Wastewater Treatment Facility Operator Qualifications [Repealed]
- 33-19-01-15 Wastewater Collection System Operator Qualifications [Repealed]
- 33-19-01-16 Substitutions or Equivalents

33-19-01-01. Responsibility.

It is the responsibility of any person or persons operating a water treatment, water distribution and storage, wastewater treatment, or wastewater collection and transfer facility or system to comply with this chapter pursuant to North Dakota Century Code chapter 23-26.

History: Amended effective June 1, 1990; February 1, 1994. **General Authority:** NDCC 23-26-07 **Law Implemented:** NDCC 23-26-07

33-19-01-02. Definitions.

As used in this chapter, unless the context or subject matter otherwise requires:

1. "Direct responsible charge" means full and active performance of onsite operation of a water or wastewater treatment facility or a water distribution and storage or wastewater collection and transfer system, where the operator is responsible for technical support of the facility or system and provides direction to other operators, is onsite or on call during shift operations, is responsible for the operation of a major segment of a facility or system, or is the sole person employed as the facility or system operator.

- 2. "Official census" means the census taken each decade or a special census taken by the United States bureau of census.
- 3. "Person" means any individual, corporation, partnership, firm, association, trust, estate, public or private institution, group, agency, political subdivision of this state, any other state or political subdivision or agency thereof and any legal successor, representative agent, or agency of the foregoing.
- 4. "Water treatment facility" includes the source or sources of water or the water treatment plant or both.
- 5. "Water distribution and storage system" means that portion of the water supply system which obtains, stores, and conveys water from the treatment facility or other supply point to the premises of the consumer.
- 6. "Wastewater treatment facility" means those systems using mechanical or nonmechanical or both types of process units for the treatment of wastewater and for the treatment and disposal of solids removed from such wastes.
- 7. "Wastewater collection and transfer system" means that portion of a wastewater system in which wastewater is conveyed to a treatment facility from the premises of a contributor.

History: Amended effective June 1, 1990; February 1, 1994. **General Authority:** NDCC 23-26-07 **Law Implemented:** NDCC 23-26-07

33-19-01-03. General.

- 1. The official census must be used to determine the population served by a water treatment facility, water distribution and storage system, wastewater treatment facility, or wastewater collection and transfer system if population equivalent data is not available.
- 2. The total number of people served on an annual average daily basis must be used to determine population served by a water treatment facility, water distribution and storage system, wastewater treatment facility, or wastewater collection and transfer system if official census data is not available.
- 3. Facilities or systems with sufficiently complicated processes may be raised to a classification higher than that indicated by population equivalent or census.
- 4. Any facility which may have a combination of treatment processes, some of which may be in different facility classes, must be classified based on the treatment process which requires the highest numerical classification.
- 5. An operator who has direct responsible charge shall hold a certificate that is at least equal to the classification of the facility or system where the operator is employed.

History: Amended effective June 1, 1990; February 1, 1994. **General Authority:** NDCC 23-26-07 **Law Implemented:** NDCC 23-26-03, 23-26-05, 23-26-07

33-19-01-04. Application for certification.

Applications for certification must be filed with the department fifteen days prior to the examination on appropriate forms. An application remains valid for a period of six months from the date of submission.

History: Amended effective June 1, 1990; February 1, 1994.

33-19-01-05. Examinations.

- 1. Written examinations must be used in determining knowledge, ability, and judgment of the applicant. Oral examinations may be used in lieu of or in conjunction with the written examinations at the discretion of the department.
- 2. Examinations must be held at places and times set by the department. At least one examination session must be held annually. Additional examination sessions may be held at the discretion of the department.
- 3. Separate examinations will be prepared for each facility or system classification.
- 4. All examinations must be graded by personnel designated by the department.
- 5. An examination may be rewritten once within one year from the date on which the original examination was written. A new certification application and the required fee must be submitted to the department to rewrite an examination.

History: Amended effective June 1, 1990; February 1, 1994. **General Authority:** NDCC 23-26-07 **Law Implemented:** NDCC 23-26-07

33-19-01-06. Fees for certification.

- 1. Fees for certification are ten dollars per examination.
- 2. Fees for annual renewals are five dollars per certificate.
- 3. The certification fee from a qualified applicant is nonrefundable and must be received by the department prior to the examination. Applicants will be notified of the results of the examinations. Papers and test material remain the property of the department. Applicants may, upon request, review the results with the department.
- 4. Fees received from operators whose application for certification has been rejected will be returned.

History: Amended effective June 1, 1990; February 1, 1994. **General Authority:** NDCC 23-26-07 **Law Implemented:** NDCC 23-26-06, 23-26-07

33-19-01-07. Issuance of certificates.

- 1. Upon satisfactory compliance with the certification qualifications, fee, and examination requirements provided herein, the department will issue a certificate to the applicant. The certificate will indicate the operator certification grade, the class of facility or system the applicant is certified to operate, the certificate number, and date of issuance.
- 2. To maintain certification, all certified operators are required to earn continuing education credits by attending training programs, seminars, workshops, and schools established or officially recognized by the department.
 - a. The number of continuing education credits that can be earned by attending officially recognized training programs, seminars, workshops, and schools must be established and regulated by the department.

- b. The number of continuing education credits to be earned within a three-year period of time is twelve.
- c. Training programs offered by other government agencies, educational institutions, and operator organizations may be used for the continuing education credit requirements at the discretion of the department.
- d. Certified operators who no longer operate facilities or systems within the boundaries of the state are exempt from the continuing education credit requirements. They may maintain valid North Dakota operator's certificates by paying the required annual renewal fees. If they return to work as an operator in the state, the continuing education credit requirements are in effect and they must earn the required number of training credits during their first year upon returning to North Dakota.
- e. A certified operator not in compliance with the continuing education credit requirements, as determined by the department, is subject to revocation or suspension of the operator's certification.
- 3. Certificates are valid for a maximum of one year and expire on the first day of July. Certificates which have been revoked for a cause, invalidated, or replaced by one of higher grade are not renewable, except as noted in this chapter. Annual certificate renewal cards must be issued by the department upon receipt of the renewal fee as previously set forth.
- 4. An operator whose certification is invalidated because of failure to renew may apply for renewal within one year following the certificate's expiration date. The operator may be issued a certificate of the same category, grade, and classification if the request for renewal is received by the department within one year after the expiration date of the certificate, the continuing education requirements are satisfied, and all delinquent fees are paid. Failure to renew certification for a period of more than one year following expiration of the certificate will require requalification by reapplication, reexamination, and payment of examination fees before recertification is granted.
- 5. Certificates remain valid as long as the operator exercises reasonable care and judgment in the application of duties and satisfies the continuing education and annual renewal requirements as previously set forth. Certificates may be revoked as provided in North Dakota Century Code chapter 23-26. No certificate will be valid if obtained through fraud, deceit, misrepresentation, or the submission of false or inaccurate data, information, or qualifications.
- 6. The department may issue certificates by reciprocity, without written examination, to any person holding a certificate from any other state, territory, possession of the United States of America, or any country providing that the requirements for certification of operators under which the operator's certificate was issued are equal to or higher than specified under this chapter for a like certificate and providing further that reciprocal privileges are granted to certified operators in North Dakota.
- 7. Certificates in an appropriate category, grade, and classification may be issued without examination to qualifying operators as provided by North Dakota Century Code chapter 23-26.
- 8. A temporary restricted operator's permit may be issued by the department upon application by the facility or system owner on behalf of the operator where circumstances may exist to warrant issuance. A temporary restricted operator's permit will be valid for one year from the date of issuance. When the operator satisfies the minimum grade level qualifications and requirements for certification, the operator shall submit an application for certification to the department and write the appropriate category and class examination during the first examination session offered by the department following the date of application.

9. The department may revoke or suspend the certificate of an operator issued hereunder if it is found by the department that the operator has practiced fraud or deception by willfully changing records or by omission, or knowingly giving false information to the department, or failed to take corrective action required by the department, or failed to take required samples, or failed to protect the public health or the state's water resources; or when it is found that reasonable care, judgment, or the application of the operator's knowledge or ability was not used in the performance of the operator's duties. A certificate may not be revoked or suspended except after a hearing before the department. If a certificate is suspended or revoked as herein provided, a new application for certification may be considered by the department if, when, and after the conditions upon which suspension or revocation was based have been corrected and evidence of this fact has been satisfactorily submitted to the department. A new certificate may then be granted by the department.

History: Amended effective June 1, 1990; February 1, 1994. General Authority: NDCC 23-26-07 Law Implemented: NDCC 23-26-05, 23-26-07

33-19-01-08. Water treatment facility classifications.

Water treatment facilities must be classified in one of five classes. Classifications must be based on population served, design population, type of treatment, raw water quality and volume of water to be treated, and complexity of sludge handling units. Facilities may be classified one level higher than indicated solely by population at the discretion of the department if the facility has special design features or complex features or characteristics unusually difficult to operate, by reason of raw water unusually difficult to treat, by reason of volume of water treated, or by reason of a combination of such conditions or circumstances.

- 1. **Class IA.** All water facilities using simple chemical or physical treatment processes and designed to serve a population of less than five hundredpersons.
- 2. **Class I.** All water facilities using chemical treatment processes and designed to serve a population of five hundred to five thousand persons. This will include water facilities utilizing disinfection, fluoridation, corrosion control, sequestering, or combinations of these processes or other processes that involve simple chemical addition and a minor degree of operational control.
- 3. Class II.
 - a. All water facilities using chemical treatment processes and designed to serve a population of five thousand to fifteen thousand persons. This will include water facilities utilizing disinfection, fluoridation, corrosion control, sequestering, or combinations of these processes or other processes that involve simple chemical addition and a moderate degree of operational control.
 - b. All water plants using chemical softening processes and filtration requiring a moderate degree of operational control serving a population of less than one thousand persons.
 - c. All water plants using coagulation, sedimentation, and filtration for clarification requiring a moderate degree of operational control serving a population of less than one thousand five hundred persons.
 - d. All water plants using chemical oxidation of iron or manganese and filtration requiring a moderate degree of operational control serving a population of less than two thousand persons.

e. All water plants using processes requiring a moderate degree of operational control but not listed in subdivisions b, c, and d and serving a population of less than two thousand persons.

4. Class III.

- a. All water facilities using chemical treatment processes and designed to serve a population of fifteen thousand persons or more. This will include water facilities utilizing disinfection, fluoridation, corrosion control, sequestering, or combinations of these processes or other processes that involve simple chemical addition and a high degree of operational control.
- b. All water plants using chemical softening processes and filtration requiring a high degree of operational control serving a population of one thousand to five thousand persons.
- c. All water plants using coagulation, sedimentation, and filtration for clarification requiring a high degree of operational control serving a population of one thousand five hundred to ten thousand persons.
- d. All water plants using chemical oxidation of iron or manganese and filtration requiring a high degree of operational control serving a population of two thousand to fifteen thousand persons.
- e. All water plants using processes requiring a high degree of operational control but not listed in subdivisions b, c, and d and serving a population of two thousand to fifteen thousand persons.

5. Class IV.

- a. All water plants using chemical softening processes and filtration requiring a high degree of operational control serving a population of five thousand or more persons.
- b. All water plants using coagulation, sedimentation, and filtration for clarification requiring a high degree of operational control serving a population of ten thousand or more persons.
- c. All water plants using chemical oxidation of iron or manganese and filtration requiring a high degree of operational control serving a population of fifteen thousand or more persons.
- d. All water plants using processes requiring a high degree of operational control but not listed in subdivisions a, b, and c and serving a population of fifteen thousand or more persons.

History: Amended effective June 1, 1990; February 1, 1994. General Authority: NDCC 23-26-07 Law Implemented: NDCC 23-26-03, 23-26-07

33-19-01-08.1. Water distribution and storage system classifications.

Water distribution and storage systems must be classified in one of five classes. Classifications must be based on population served, design population, type of distribution and storage system, and the volume of water to be handled. Systems may be classified one level higher than indicated solely by population at the discretion of the department by reason of the incorporation in the system of special design features or complex features or characteristics unusually difficult to operate, by reason of conditions of volume and flow, or by reason of a combination of such conditions and circumstances.

- 1. **Class IA.** All water distribution and storage systems serving a population of less than five hundred persons.
- 2. **Class I.** All water distribution and storage systems serving a population of five hundred to one thousand five hundred persons.
- 3. **Class II.** All water distribution and storage systems serving a population of one thousand five hundred to fifteen thousand persons.
- 4. **Class III.** All water distribution and storage systems serving a population of fifteen thousand to fifty thousand persons.
- 5. **Class IV.** All water distribution and storage systems serving a population of fifty thousand persons or more.

History: Effective June 1, 1990; amended effective February 1, 1994. **General Authority:** NDCC 23-26-07 **Law Implemented:** NDCC 23-26-03, 23-26-07

33-19-01-09. Wastewater treatment facility classifications.

Wastewater treatment facilities must be classified in one of five classes. Classifications must be based on population served, design population, type of treatment, character and volume of wastes to be treated, and the use and nature of the water resources receiving the facility effluent. Facilities may be classified one level higher than indicated solely by population at the discretion of the department if the facility has special design features or complex features or characteristics unusually difficult to operate, by reason of a waste unusually difficult to treat, by reason of conditions of flow, or by reason of the receiving water quality classification requiring an unusually high degree of facility operational control, or by reason of a combination of such conditions or circumstances.

- 1. **Class IA.** All wastewater stabilization ponds, land treatment facilities, wetlands treatment facilities, or other nonmechanical facilities requiring a minor degree of operational control serving a population equivalent of less than five hundred persons.
- 2. **Class I.** All wastewater stabilization ponds, land treatment facilities, wetlands treatment facilities, or other nonmechanical facilities requiring a minor degree of operational control serving a population equivalent of five hundred to less than ten thousand persons.
- 3. Class II.
 - a. All mechanical facilities, mechanically aerated stabilization ponds, oxidation ditches, or other facilities requiring a moderate degree of operational control serving a population equivalent of less than ten thousand persons.
 - b. All wastewater stabilization ponds, land treatment facilities, wetlands treatment facilities, or other nonmechanical facilities requiring a minor degree of operational control serving a population equivalent of ten thousand persons or more.

4. Class III.

- a. All mechanical facilities, mechanically aerated stabilization ponds, oxidation ditches, or other facilities requiring a moderate degree of operational and laboratory control serving a population equivalent of ten thousand persons or more.
- b. All activated sludge facilities, trickling filter facilities, rotating biological contactor facilities, separate sludge stabilization facilities, or other mechanical facilities requiring a high

degree of operational and laboratory control serving a population equivalent of less than ten thousand persons.

5. **Class IV.** All activated sludge facilities, trickling filter facilities, rotating biological contactor facilities, separate sludge stabilization facilities, or other mechanical facilities requiring a high degree of operational and laboratory control serving a population equivalent of ten thousand persons or more.

History: Amended effective June 1, 1990; February 1, 1994. General Authority: NDCC 23-26-07 Law Implemented: NDCC 23-26-03, 23-26-07

33-19-01-09.1. Wastewater collection and transfer system classifications.

Wastewater collection and transfer systems must be classified in one of five classes. Classifications must be based on population served, design population, type of collection and transfer system, and the character and volume of wastes to be handled. Systems may be classified one level higher than indicated solely by population at the discretion of the department by reason of the incorporation in the system of special design features or complex features or characteristics unusually difficult to operate, by reason of conditions of flow, or by reason of a combination of such conditions and circumstances.

- 1. **Class IA.** All wastewater collection and transfer systems serving a population of less than five hundred persons.
- 2. **Class I.** All wastewater collection and transfer systems serving a population of five hundred to one thousand five hundred persons.
- 3. **Class II.** All wastewater collection and transfer systems serving a population of one thousand five hundred to fifteen thousand persons.
- 4. **Class III.** All wastewater collection and transfer systems serving a population of fifteen thousand to fifty thousand persons.
- 5. **Class IV.** All wastewater collection and transfer systems serving a population of fifty thousand persons or more.

History: Effective June 1, 1990; amended effective February 1, 1994. **General Authority:** NDCC 23-26-07 **Law Implemented:** NDCC 23-26-03, 23-26-07

33-19-01-10. Change of classification.

Classification of any treatment facility or distribution and storage or collection and transfer system may be changed at the discretion of the department by reason of changes in any condition or circumstance on which the original classification was based. The department shall provide notice of any classification change to the owner of the facility or system.

History: Amended effective June 1, 1990; February 1, 1994. General Authority: NDCC 23-26-07 Law Implemented: NDCC 23-26-03, 23-26-07

33-19-01-11. Certification requirements.

1. Operator certification is mandatory for all persons in direct responsible charge of the operation or maintenance of water treatment facilities, water distribution and storage systems, wastewater treatment facilities, or wastewater collection and transfer systems as required by North Dakota Century Code section 23-26-08 and applicable federal laws and regulations.

- Five grades of operators for water treatment facilities, water distribution and storage systems, wastewater treatment facilities, and wastewater collection and transfer systems are hereby established. To qualify for certification in a given grade, an applicant must satisfy the education and experience requirements, or their equivalents, of the grade for which the certification application is submitted.
- 3. All applicants must pass a certification examination as developed and administered by the department for the class of facility or system for which the certification application is submitted.

History: Amended effective June 1, 1990; February 1, 1994. **General Authority:** NDCC 23-26-07 **Law Implemented:** NDCC 23-26-05, 23-26-07

33-19-01-12. Operator qualifications.

The following grade qualifications are intended to be as nearly compatible as possible to the corresponding facility or system classification.

1. Grade IA.

- a. Completion of high school or equivalent, and a minimum of six months of acceptable operation of a facility or system of class IA or higher.
- b. A combination of education qualifications and experience that will be satisfactory to the department. No substitute may be permitted for minimum experience requirements, unless an exception is granted under section 33-19-01-07.

2. Grade I.

- a. Completion of high school or equivalent, and a minimum one year of acceptable operation of a facility or system class I or higher; or
- b. A combination of education qualifications and experience that will be satisfactory to the department. No substitute may be permitted for minimum experience requirements, unless an exception is granted under section 33-19-01-07.

3. Grade II.

- a. A four-year college degree and a minimum one year of acceptable operation of a facility or system of class I or higher, one year of which must have been in a position of direct responsible charge;
- b. Two years post high school education and a minimum two years of acceptable operation of a facility or system of class I or higher, one year of which must have been in a position of direct responsible charge;
- c. Completion of high school or equivalent, and a minimum three years of acceptable operation of a facility or system of class I or higher, one year of which must have been in a position of direct responsible charge; or
- d. A combination of education qualifications and experience that will be satisfactory to the department. No substitute may be permitted for the minimum experience requirement, unless an exception is granted under section 33-19-01-07.

4. Grade III.

- a. A four-year college degree and a minimum two years of acceptable operation of a facility or system of class II or higher, two years of which must have been in a position of direct responsible charge;
- b. Two years post high school education and a minimum three years of acceptable operation of a facility or system of class II or higher, two years of which must have been in a position of direct responsible charge;
- c. Completion of high school or equivalent, and a minimum four years of acceptable operation of a facility or system of class II or higher, two years of which must have been in a position of direct responsible charge; or
- d. A combination of education qualifications and experience that will be satisfactory to the department. No substitute may be permitted for the minimum experience requirement, unless an exception is granted under section 33-19-01-07.

5. Grade IV.

- a. A four-year college degree and a minimum three years of acceptable operation of a facility or system of class III or higher, two years of which must have been in a position of direct responsible charge;
- b. Two years of post high school education and a minimum four years of acceptable operation of a facility or system of class III or higher, two years of which must be in a position of direct responsible charge;
- c. Completion of high school or equivalent and a minimum five years of acceptable operation of a facility or system of class III or higher, two years of which must have been in a position of direct responsible charge; or
- d. A combination of education qualifications and experience that will be satisfactory to the department. No substitute may be permitted for the minimum experience requirement, unless an exception is granted under section 33-19-01-07.

History: Amended effective June 1, 1990; February 1, 1994. **General Authority:** NDCC 23-26-07 **Law Implemented:** NDCC 23-26-03, 23-26-05, 23-26-07

33-19-01-13. Water distribution system operator qualifications.

Repealed effective February 1, 1994.

33-19-01-14. Wastewater treatment facility operator qualifications.

Repealed effective February 1, 1994.

33-19-01-15. Wastewater collection system operator qualifications.

Repealed effective February 1, 1994.

33-19-01-16. Substitutions or equivalents.

In determining the qualifications of operators desiring to be certified, the following substitutions or equivalents may be used:

- 1. One year of acceptable operating experience may be considered equivalent to one year of high school.
- 2. Experience applied to the educational requirement may not also be applied to the experience requirement.
- 3. An acceptable high school equivalency certificate may be used to substitute for graduation from high school.
- 4. No substitutions or equivalents will be allowed in lieu of the minimum acceptable experience in the operation of water treatment, water distribution and storage, wastewater treatment, and wastewater collection and transfer facilities or systems.
- 5. The department may waive the experience requirements in an exceptional set of circumstances.

History: Amended effective June 1, 1990; February 1, 1994. General Authority: NDCC 23-26-07 Law Implemented: NDCC 23-26-03, 23-26-07