

SYSTEM REQUIREMENTS FOR EMPLOYING CERTIFIED WATER AND WASTEWATER OPERATORS

North Dakota Department of Environmental Quality - Division of Municipal Facilities
 4201 Normandy St
 Bismarck, ND 58503
 Telephone: 701.328.5211 - Fax: 701.328.5200
 Website: www.deq.nd.gov

The North Dakota Department of Environmental Quality, Division of Municipal Facilities, is responsible for implementing North Dakota's water and wastewater operator certification requirements as set forth under NDCC Ch. 23.1-07 and its implementing regulations, NDAC Art. 33.1-19. Under these requirements, certain systems must employ appropriately certified water and wastewater operators. Appropriately certified refers to certification at a grade corresponding to the class of facility being operated, which is based on the level of treatment provided and/or the population served by the system. This document describes which systems are required to employ certified operators.

Water Systems

Except in certain situations, public water systems are required to employ appropriately certified water treatment and water distribution system operators. Certification requirements are based on public water system type, type of water source(s) used, type and degree of treatment provided, and size and complexity of the water distribution/storage system.

A **public water system** provides water for human consumption through pipes or any other constructed delivery system that has at least 15 service connections or regularly serves at least 25 individuals 60 or more days out of the year. A public water system is either a community water system, a nontransient noncommunity water system, or a transient noncommunity water system.

Community water systems serve year-round residents and include cities, rural water systems, and mobile home parks.

Nontransient noncommunity water systems serve at least 25 of the same persons more than six months per year and include schools, businesses, and industries.

Transient noncommunity water systems primarily provide service to transient populations and include bars, restaurants, hotels, campgrounds, and rest areas.

Water source types include groundwater, surface water, and groundwater under the direct influence of surface water (GWUDISW). GWUDISW is groundwater with significant occurrence of organisms associated with surface water.

Operator certification requirements for water systems are as follows:

- **Community Water Systems (All Water Sources)**

A certified water treatment operator is required for a system that treats its own source(s) or that treats water obtained from another regulated public water system. All community water systems are required to have a certified water distribution system operator.

- **Nontransient Noncommunity Water Systems (All Water Sources)**

A certified water treatment operator is required for a system that treats its own source(s) or that treats water obtained from another regulated public water system. A certified water distribution system operator may be required based on the size and complexity of the water distribution/storage system.

- **Transient Noncommunity Water Systems (Surface Water or GWUDISW)**

A certified water treatment operator is required for a system that treats its own source(s) or that treats water obtained from another regulated public water system. A certified water distribution system operator may be required based on the size and complexity of the water distribution/storage system.

- **Transient Noncommunity Water Systems (Groundwater Only and Not GWUDISW)**

A certified water treatment operator is required **ONLY IF** the system provides treatment **beyond** processes involving simple chemical addition and minor operation control (beyond processes such as disinfection, fluoridation, sequestration, and corrosion control). This applies both to systems that treat their own source(s) and to systems that treat water obtained from another regulated public water system. Based on the size and complexity of the water distribution/storage system, a certified water distribution operator **may** be required **ONLY IF** a certified water treatment operator is required.

Wastewater Systems

Appropriately certified operators are required for any wastewater treatment plant or wastewater collection system which serves a population equivalent (PE) of 25 or more persons. There is one exception to this requirement. Certified operators are **not** required for systems that use wastewater stabilization ponds or other non-mechanical wastewater treatment plants and serve PEs of less than 500 persons. Operators of such systems can choose and are encouraged to become certified. A PE of 25 and 500 persons corresponds to a daily biochemical oxygen demand contribution of 4.25 and 85 pounds, respectively.

Questions and More Information

Questions and requests for more information on North Dakota's water and wastewater operator certification requirements may be directed to Division of Municipal Facilities, at 701.328.5211 or DEQ-MF-Inspection@nd.gov .

I. Operator Certification

It is unlawful for anyone to operate a water treatment facility, a water distribution system, a wastewater treatment facility, or a wastewater collection system serving a population of 25 or more if that person is not appropriately certified. This excludes operators of wastewater collection systems and wastewater treatment facilities which use stabilization ponds or other nonmechanical treatment processes to serve populations less than 500.

A. Direct Responsible Charge (D.R.C)

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.

Direct responsible charge means full and active performance of on site operation. In addition to full and active performance of on site operation, one or several of the following may be included:

1. Responsible for technical support and provides direction to other operators
2. On site or on call during shift operations
3. Responsible for operation of a major segment of a facility or system
4. Operation of a small facility or system as sole employee

B. Becoming Certified

1. Examination
 - a. Candidates must apply 15 days prior to test date
 - b. Meet education and experience requirements
 - c. Pay the \$50.00 examination fee
 - d. Pass the examination with a score of 70% or higher
2. Reciprocity
 - a. Candidates must be certified in another state by exam
 - b. Fulfill education and experience requirements
 - c. Pay the \$50.00 reciprocity fee

C. Education and Experience Requirements

1. High School Diploma or equivalent (GED)

<u>Class of Exam</u>	<u>Experience</u>	<u>D.R.C.</u>
IA	0.5 year	---
I	1 year	---
II	3 years	1 year
III	4 years	2 years
IV	5 years	2 years

2. Post High School (minimum 2 years in related field)

<u>Class of Exam</u>	<u>Experience</u>	<u>D.R.C.</u>
IA	0.5 year	---
I	1 year	---
II	2 years	1 year
III	3 years	2 years
IV	4 years	2 years

3. BS or other related 4 Year Degree

<u>Class of Exam</u>	<u>Experience</u>	<u>D.R.C.</u>
IA	0.5 year	---
I	1 year	---
II	1 year	1 year
III	2 years	2 years
IV	3 years	2 years

D. Maintaining Certification

1. Certificates expire each year on the first day of July
2. To Renew
 - a. Operator's need a minimum of 12 Continuing Education Credits (CECs)
 - b. Pay annual renewal fees are \$25.00 per certificate
3. CECs may be earned by attending training programs, seminars, workshops, and schools established or officially recognized by the Department of Environmental Quality.
 - a. Each operator must earn 12 CECs which are valid for a three year period
 - b. Certified operators no longer operating within the state are exempt.

Note: You are responsible for notifying the Division of Municipal Facilities on trainings you have taken, that are not on the pre-approved list, so credits may be issued.

II. Facility Classifications (general guidelines)

A. Water Treatment Plant

This refers to a facility which in some way alters the physical, chemical, or bacteriological quality of the water.

1. Systems using simple chemical addition, such as, disinfection, fluoridation, corrosion control, or sequestering:

Class IA	serving a population less than 500
Class I	serving a population of 500 to 5,000
Class II	serving a population of 5,000 to 15,000
Class III	serving a population of 15,000 or more

2. Systems using chemical softening processes and filtration or membrane technology:

Class II	serving a population of less than 1,000
Class III	serving a population of 1,000 to 5,000
Class IV	serving a population of 5,000 or more

3. Systems using coagulation, flocculation, sedimentation, and filtration for clarification:

Class II	serving a population of less than 1,500
Class III	serving a population of 1,500 to 10,000
Class IV	serving a population of 10,000 or more

4. Systems using chemical oxidation of iron or manganese and filtration:

Class II	serving a population of less than 2,000
Class III	serving a population of 2,000 to 15,000
Class IV	serving a population of 15,000 or more

B. Water Distribution System

This refers to a system which obtains, stores, and conveys water from the treatment facility to the consumer.

Class IA	serving a population of less than 500
Class I	serving a population of 500 to 1,500
Class II	serving a population of 1,500 to 15,000
Class III	serving a population of 15,000 to 50,000
Class IV	serving a population of 50,000 or more

C. Wastewater Treatment Plant

This refers to a facility used for the treatment and disposal of wastewater and the solids removed from such wastewater.

1. Serving less than 10,000 persons

Class IA	Stabilization ponds serving 500 or less
Class I	Stabilization ponds serving 500 to 9,999
Class II	a) All mechanical facilities b) Mechanically aerated ponds c) Oxidation ditches
Class III	a) Activated sludge b) Trickling filter c) Rotating biological contactors d) Sludge stabilization facilities

2. Serving 10,000 or more persons

Class II	Stabilization ponds
Class III	a) All mechanical facilities b) Mechanically aerated ponds c) Oxidation ditches
Class IV	a) Activated sludge b) Trickling filter c) Rotating biological contactors d) Sludge stabilization facilities

D. Wastewater Collection System

This refers to a system used to convey wastewater from the premises of a contributor to the wastewater treatment facility.

Class IA	serving a population of less than 500
Class I	serving a population of 500 to 1,500
Class II	serving a population of 1,500 to 15,000
Class III	serving a population of 15,000 to 50,000
Class IV	serving a population of 50,000 or more