

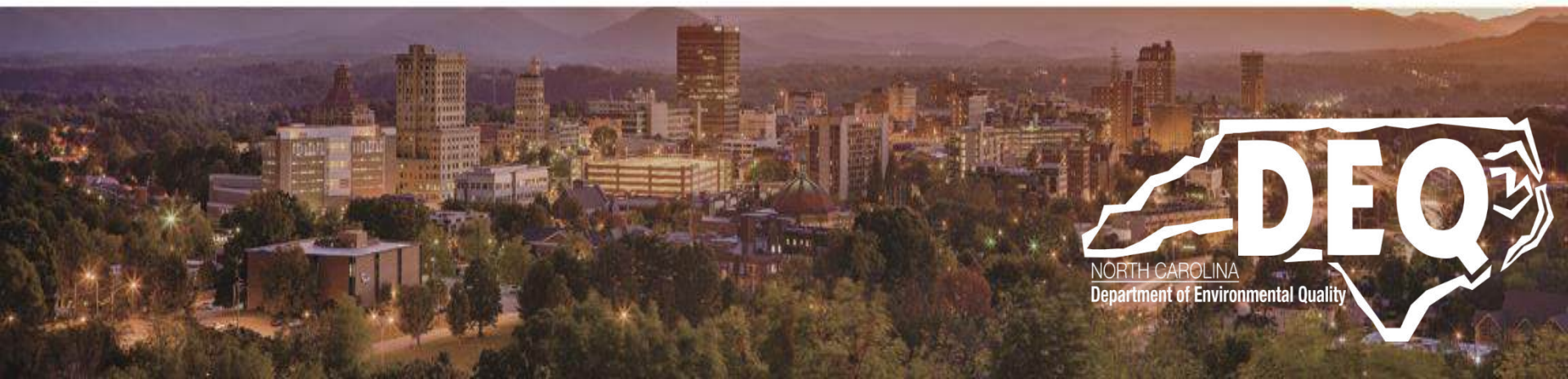


Operator Certification Program

Jeff Talbott

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Public Water Supply Section



Operator Certification

Goals:

- Ensure public water treatment facilities have properly certified operators.
- Certify water treatment facility operators by examination.
- Provide logistical support for the Water Treatment Facility Operators Certification Board (WTFOCB).
- Provide online availability of operator records and information.
- Review and pre-approval of courses for professional growth.
- Maintain operator records.
- Manage the annual operator renewal process.



Operator Certification

Certification	Total
A Surface	1,013
B Surface	359
C Surface	519
A Well	272
B Well	459
C Well	1,690
A Distribution	1,193
B Distribution	1,101
C Distribution	1,353
Cross Connection	1,127
Total certifications	9,086

- Ensure skilled professionals are overseeing drinking water and wastewater facilities – 10 different certification types for DW (**5,773** total operators).



Operator Certification

Breakdown of water systems within each category of classification per Safe Drinking Water Information System (SDWIS) data (as of April 3, 2024). The “# of Certified Operators” is the number of operators holding an active certification within each category of classification during the 2023 reporting period.

Classification	# of CWS	# of NTNCWS	# of TNCWS	# Certified Operators
Well	1,487	303	304	2,022
Surface	128	5		1,839
Distribution	1,986	318		3,437
Cross-Connection	351	6		952



Operator Certification

Trend indicators regarding certified operators:

Trend Indicator	2019	2020	2021	2022	2023
No. of Certified Operators	5,760	5,655	5,656	5,626	5,700
Initial Certifications Issued	337	219	337	347	442
Upgraded Certifications Issued	625	192	335	405	379
No. of Operators Decertified	377	446	430	660	493



Operator Certification

Certification	Total
Animal Waste A	1,924
Animal Waste B	216
Collections I	1,380
Collections II	1,270
Collections III	436
Collections IV	1,043
Wastewater/Biological I	1,211
Wastewater/Biological II	932
Wastewater/Biological III	437
Wastewater/Biological IV	1,255
Physical/Chemical I	1,182
Physical/Chemical II	252
Land Application	741
Surface Irrigation	792
Subsurface	876
Total	13,947

- Ensure skilled professionals are overseeing drinking water and wastewater facilities – 15 different certification types for WW (**9,801** total operators).



Operator Certification

Seven staff. Two programs.

Name	Program	Specialty
Stephen Denning	Drinking Water	Distribution & Cross Connection exams, PGH course preapproval
Alaina Strater	Drinking Water	Well & Surface exams, exam registration & renewal payment processing, PGH roster submittals & credit hours, wallet cards & certificate reprints
Chris Brown	Drinking Water	ORC Issues/Exceedance requests, certification reinstatement, quarterly board meeting secretary
Ashley Coleman	Drinking/Wastewater	Process mail, name and address change requests, manage database information in BIMS/IBeam
Jenee Williamston	Wastewater	Certification reinstatement, CE inquiries, certificate renewal, exam registration
Patrick Beggs	Wastewater	Animal waste coordinator, certification school approvals, continuing ed & training approval
Renee Thompson	Wastewater	Course auditing, reciprocity, facility classifications, exam creation.
Jeff Talbott	Drinking/Wastewater	Program supervisor.

Operator Certification

- Protect public health.
- Maintain safe drinking water and water sources.
- Establish minimum professional standards for the operation and maintenance of public water systems.
- Administer state examination process, process professional growth hours, approve continuing education courses, manage certification renewal process, assist out of state operators with reciprocity process, ORC issues/exceedance requests, serve as a liaison to the Water Treatment Facility Operator Certification Board.



Operators in Responsible Charge (ORC)

What is an ORC? Establish operating procedures.

- ORC's must possess certificate = or > that of the facility
- ORC shall manage the daily operation and maintenance of the facility.

- General Responsibilities
 - Ensure Daily Operations/comply with water quality standards
 - Monitor, inspect, and maintain equipment and processes
 - Oversee facility operations

- Regulatory Compliance
 - Submit operational and compliance reports to the regulatory authority
 - Address non-compliance or system failures promptly

- Documentation and Reporting
 - Maintain logs for maintenance, testing, operational changes
 - Document inspections and equipment performance
 - Report incidents



Facility Classifications

- Classify facilities based on the information received from the RO.
- Classifications utilize a point system based on a variety of factors:
 - Population served, treatment technology available, biological/physical/chemical processes at work
- Public water system treatment facilities are classified based on the sources of water and the number of points assigned to the facilities pursuant to rule 15A NCAC 18D .0203
 - Class C systems: 1-50 points
 - Class B systems: 51-110 points
 - Class A systems: over 110 points



Facility Classifications

- Distribution systems: Distribution systems in NC are classified based on the number of service connections and complexity.
 - Class D-Distribution is any system with 100 or fewer service connections with no fire protection system;
 - Class C-Distribution is any system with more than 100 service connections but not exceeding 1,000 service connections with no fire protection system;
 - Class B-Distribution is any system with more than 1,000 service connections but not exceeding 3,300 service connections or any system not exceeding 1,000 service connection with a fire protection system, and;
 - Class A-Distribution is any system more > 3,300 connections.



Facility Classifications

- The Classification of Cross-Connection Control shall apply to any distribution system that is required to have installed five or more testable backflow prevention assemblies.
- Classification applications are received by the program, processed, and brought forward to our Water Treatment Facility Operator Certification Board members to vote on during the quarterly meetings.



Exceedance Requests

- According to our ORC rules “No person shall be in responsible charge of any combination of a surface water treatment facility, a community public water system with well water facilities, a non-community public water system with well water facilities, a distribution system, and a cross-connection control facility without **written permission from the Board.**”
 - These are known as “exceedance requests”.
- Sent in by owners/managers. Reviewed by RO and approved by the WTFOCB at our quarterly meetings.
- We CANNOT process exceedance requests without these forms. A common mistake is to ask staff to do this via phone call or email.



Water Systems Without ORCs

During Renewal season – operators are required to tell us if they are still ORCs of systems they oversee.

We track “retirements” and movement of ORCs through this process.

Additional tracking of ORCs comes from

- Communication with operators via “Removal/Resignation” form,
- Communication with RO’s/staff during site visits/sanitary surveys.

Once staff are notified an operator is no longer the ORC we remove that designation from our system, we then send a letter to the owner and the RO letting them know an ORC is required by law.



DW Operator Designation REMOVAL/RESIGNATION Form

To remove designation or resign as ORC, please submit the following information:

* Indicates required field

Facility Name *

PWS ID # (Submit this form for each PWS ID #) *

Operator's First Name *

Operator's Last Name *

Operator's Certificate # *

Effective Date *

Contact Phone Number *

Email *

Resign ALL Designations? *

Yes

No

Submit

ORC Compliance and Enforcement Process

1. Out-of-Compliance Notification
 - When a facility is found out of compliance the **clock starts**
 - Facilities are required to have an ORC at all times
2. 15-Day Letter
 - A notification letter is sent to the facility giving them **15 days** to assign an ORC
 - Failure to comply within 15 days results is a **Notice of Violation (NOV)**
3. Notice of Violation
 - The NOV grants the facility **90 days** to comply with ORC regulations
 - Administrative penalties begin accruing daily
 - If an ORC is assigned within 90 days, the penalties go away
4. Administrative Penalties
 - If no ORC = penalties are calculated for all 90 days
 - Penalties are rarely administered



Enforcement Ability

Classification	Penalty Amount Per Day	90 Day amt
A-Surface	\$25	\$2,250
B-Surface	\$15	\$1,350
C-Surface	\$10	\$900
A-Well	\$25	\$2,250
B-Well	\$15	\$1,350
C-Well	\$10	\$900
D-Well	\$5	\$450
<i>Distribution & Cross-Connection</i>		
Classification		
A-Distribution	\$25	\$2,250
B-Distribution	\$15	\$1,350
C-Distribution	\$10	\$900
D-Distribution	\$5	\$450
Cross-Connection	\$25	\$2,250



Operator Qualifications

- Applicants for certification must meet specific education/experience requirements.
- All are required to possess either a HS diploma or GED equivalent & successfully complete a required training school.
- Applicants must pass (70% or above) a written, state-administered exam that demonstrates competency of the certification sought.
- Exams are offered quarterly in Hickory, Williamston, and Raleigh.
- 2024 pass rates:

Certification	# of operators	Pass rate
Surface	493	59%
Well	390	45%
Distribution	1,000	58%
Cross Connection	112	48%
Total	1,996	52%



Operator Qualifications

- In addition to passing exams applicants must demonstrate “acceptable experience” which varies in accordance with the request classification grade and is specified within our rules.
- Operators without acceptable experience can become “certified apprentices” and may be upgraded to full certification once experience is obtained.
 - Cannot act as ORC.
- To maintain certification operators are required to complete six acceptable professional growth hours annually.
 - Approx. 3,864 courses have been pre-approved for operators with more than 400 training providers holding classes – both in person and virtual.



Professional Growth Hours

- A minimum of 6 hours are required per year.
- Classes, both in-person and virtual qualify.
- Training providers get approved through our program.
- List of opportunities available on our website:
 - Deq.nc.gov/OpCert



Professional Growth Hours – DEQ Website

The Operator Certification Program does not conduct training classes; however, you may find training opportunities below. *Questions regarding specific locations and dates should be directed to the training provider(s).*

Current Listing of Board-approved classes

Additional Approved Training Opportunities:

As **approved sponsors**, any water-related courses presented as approved courses by any of the following organizations will be deemed approved by the NCWTFOCB:

- [American Backflow Prevention Association](#)
- [CEU Plan](#)
- [NC Statewide Safety Conference](#)
- [NC One Water](#)
- [North Carolina Rural Water Association](#)
- [North Carolina Waterworks Operators Association](#)



Click on the Course Title for Course Details

Course Date	Course Title	Start Time	PGH	Course City
02/05/2025	VIRTUAL Current Technologies for W/WW	8:00	6	VIRTUAL
02/06/2025	Dual Credit Water & Wastewater Workshop	8:00	6	Hillsborough
02/11/2025	Dual Credit Water & Wastewater Workshop	8:00	6	Dunn
02/13/2025	Current Technologies for W/WW	8:00	6	Elkin
02/19/2025	Current Technologies for W/WW	8:00	6	Forest City
02/20/2025	Current Technologies for W/WW	8:00	6	Lumberton
02/22/2025	Dual Credit Water & Wastewater Workshop	10:00	6	Hendersonville
02/26/2025	Current Technologies for W/WW	8:00	6	King
03/04/2025	Dual Credit Water & Wastewater Workshop	8:00	6	Newport
03/05/2025	Current Technologies for W/WW	8:00	6	Burlington
03/12/2025	Current Technologies for W/WW	8:00	6	Pikeville
03/13/2025	Current Technologies for W/WW	8:00	6	Sanford
03/17/2025	Chemical Spill Response Training	8:00	8	New Bern
03/18/2025	Dual Credit Water & Wastewater Workshop	8:00	6	Yadkinville
03/18/2025	Dual Credit Water & Wastewater Workshop	8:00	6	Burgaw
03/19/2025	Current Technologies for W/WW	8:00	6	Newport
03/19/2025	Dual Credit Water & Wastewater Workshop	8:00	6	Morganton



Reciprocity

- We also help operators who are looking to work in NC gain certification through our reciprocity process.
- Operators from other states can use their experience to apply for certification in NC.
- Application is completed along with information about certification currently held; the state the operator is transferring from; years experience; and water treatment experience.
- Board reviews the application and make a determination.
- Several dozen per year.



Reciprocity

This is to certify that I now hold a Grade or Class _____ Operator Certification from the State of _____ and have had _____ years of water treatment experience. STATE OF LEGAL RESIDENCE: _____.
Your certification must be active to qualify for application in the State of North Carolina.

RECORD OF PREVIOUS WATER TREATMENT EXPERIENCE

NAME OF TOWN OR UTILITY _____	PWS ID# _____	
SIZE OF SYSTEM (MGD) _____	POPULATION SERVED _____	WATER SOURCE _____
SYSTEM CLASS _____	CONTACT PERSON _____	PHONE NO. _____
NATURE OF DUTIES (Describe in detail) _____	DATES: FROM _____	TO _____



Certification Renewal

Wastewater/Animal Waste			
	Certification	Fee	Complete
Invoiced	9,824	\$ 634,695.00	-
Pending	1,007	\$ 63,035.00	10%
Renewed (paid)	8,812	\$ 571,660.00	90%

Drinking Water			
	Certification	Fee	Complete
Invoiced	5,773	\$272,580	
Pending	531	\$40,060	9%
Renewed (paid)	5,242	\$232,520	91%



Future of the Program

Continue to improve processes that benefit the state and the operators.

1. Consolidated database
2. “On Demand” exams
3. Electronic payment system improvements
4. Conversion to online forms/applications
5. What do the operators want?



Questions?

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