


ROY COOPER
Governor
MICHAEL S. REGAN
Secretary
S. DANIEL SMITH
Director



April 20, 2020

MEMORANDUM

TO: Michael S. Regan
DEQ Secretary

THROUGH: S. Daniel Smith, Director
Division of Water Resources 

FROM: Sam Call, Chairman
North Carolina Water Treatment Facility
Operators Certification Board

SUBJECT: 2019 Annual Report to the Governor

I have attached our 2019 Annual Report to the Governor, for your review, as required by NCGS 90A-21(f). If you concur with this report, please forward it to the appropriate contact within the Governor's Office.

Thank you for your interest in the Certification Board activities.

cc: S. Daniel Smith
Bob Midgette
Steve Reid



North Carolina Department of Environmental Quality | Division of Water Resources
512 North Salisbury Street | 1611 Mail Service Center | Raleigh, North Carolina 27699-1611
919.707.9000

ROY COOPER

Governor

MICHAEL S. REGAN

Secretary

S. DANIEL SMITH

Director



NORTH CAROLINA
Environmental Quality

April 23, 2020

The Honorable Roy Cooper
Governor of North Carolina
State Capitol
Raleigh, North Carolina 27611

Dear Governor Cooper:

Please find attached the 2019 Annual Report regarding the North Carolina Water Treatment Facility Operators Certification Board, as required by General Statutes of North Carolina, Section 90A-21(f). If you have questions or would like to discuss the Certification Program further, please do not hesitate to contact me at your convenience. I can be reached by calling (336) 838 - 4631 x221

Thank you for your time and attention.

Sincerely,

A handwritten signature in cursive script, appearing to read "Samuel H. Call".

Sam Call, Chairman
North Carolina Water Treatment Facility
Operators Certification Board

Attachments

cc: Michael S. Regan, DEQ Secretary



North Carolina Department of Environmental Quality | Division of Water Resources
512 North Salisbury Street | 1635 Mail Service Center | Raleigh, North Carolina 27699-1635
919.707.9040

North Carolina
Water Treatment Facility Operators Certification Board

2019 Annual Report

To the Honorable Roy Cooper
Governor of North Carolina

Prepared by:

Sarah Long, Second Vice-Chair
NCWTFOCB

A. Description of Program:

In 1969, the North Carolina General Assembly passed a law providing for the professional certification of water treatment facility operators. N.C. General Statute (NCGS) 90A-20 through 90A-32 provides for the establishment of the Water Treatment Facility Operators Board of Certification (i.e., the “Board”), for the classification of water treatment facilities, and for the issuance of licensing certificates to water treatment facility operators.

NCGS 90A-20 states that the purpose of the certification program is “to protect the public health and to conserve and protect the water resources of the State; to protect the public investment in water treatment facilities; to provide for the classifying of public water treatment facilities; to require the examination of water treatment facility operators and the certification of their competency to supervise the operation of water treatment facilities; and to establish the procedures for classification and certification. Further, it is the purpose of this Article to provide for the certification of personnel operating the distribution portion of a water treatment facility.”

The Operator Certification Program is located within the Public Water Supply Section of the Division of Water Resources and provides staff support to the Board. The program includes education and training specialists as well as administrative support staff. Staff performs a variety of functions that include: administering statewide examinations, approving and auditing professional growth opportunities, managing database and state records, providing training and outreach, processing fee receipts, participating in the enforcement of *Rules Governing Water Treatment Facility Operators* (Title 15A Subchapter 18D), and coordinating an annual license renewal process.

The existence and successful function of the State’s certification efforts has consequences with respect to federal funding. On an annual basis, the U.S. Environmental Protection Agency (EPA) reviews and approves certification program activities and reserves the authority to withhold twenty percent of the Drinking Water State Revolving Fund, a federal grant that supports drinking water infrastructure, if baseline program expectations are not met. To date, EPA has always approved North Carolina’s certification program activities.

B. Budgetary Considerations:

Certification activities are supported by operator fees generated by the program (as per 15A NCAC 18D .0304). The program does not receive money from the general fund, nor does it regularly receive federally appropriated funds. Fee receipts are used for a variety of purposes, including salary support, IT services/software development, capital equipment, and expenditures associated with training and examinations administered throughout the State.

Table 1 (below) provides five years of historical data relevant to the program’s financial status. Additional financial data is available for earlier years and is available upon request. Unspent funds remaining at the end of the fiscal year have been traditionally transferred to the General Assembly. This situation has resulted in difficulty budgeting for periodic, significant-cost items that are necessary to improve the program (such as IT applications and database updates). In recent years, the program has supported efforts to potentially revise statutory language that could result in non-reversion of operator fees. Such revisions have not occurred.

Table 1. Historical financial data (dollars)

Financial Indicator:	FY2015	FY2016	FY2017	FY2018	FY2019
Projected Budgetary Needs	310,144	316,396	351,419	339,052	284,903
Actual Expenses	265,080	301,618	307,900	317,460	277,688
Actual Fee Receipts	301,570	357,566	374,199	318,895	319,495

C. Status of Professional Operators:

North Carolina requires four distinct categories of certified professionals to operate the State's drinking water treatment facilities. These categories include surface, well, distribution and cross connection operators. To become certified, an operator must complete a Board-approved training program and also pass an examination administered by the certification program.

The State's community of certified operators has experienced a slight increase over the past five years, as shown below in Table 2. The current number of operators appears adequate to meet demand.

Table 2. Trend indicators regarding certified operators

Trend Indicator:	2015	2016	2017	2018	2019
No. of Certified Operators	5,519	5,585	5,632	5,683	5,760
Initial Certifications Issued	279	363	291	411	337
Upgraded Certifications Issued	324	298	316	497	625
No. of Operators Decertified	347	447	484	519	377

D. Enforcement Activities:

With few exceptions, public water systems in North Carolina must have a certified operator in responsible charge (ORC) for each water treatment facility that: (i) alters the physical, chemical or microbiological characteristics of the water; (ii) has approved plans for such alterations; or (iii) has equipment installed for such alterations (as per 15A NCAC 18D .0206). The Operator Certification Program, with input from Public Water Supply Section's Regional Office staff and water system officials, maintains ORC information for all the State's public water systems. In instances of non-compliance, the program issues notices of violation (NOVs). The Section Chief of the Public Water Supply Section has designated authority to assess administrative penalties (APs) in cases when non-compliance exceeds 90 days. Once an administrative penalty is assessed, the Protection and Enforcement Branch of the Public Water Supply Section pursues enforcement actions with assistance from the NC Department of Justice. Table 3 (below) shows a summary of enforcement activities that have occurred over the last five years. In 2019, there were 20 NOVs and five APs issued.

The Board has authority to take disciplinary action and revoke certifications in cases where negligence, operator incompetence, or criminal activity has occurred. The Board considered two disciplinary actions in 2019. One resulted in the revocation of licensure, and the second was appealed by the operator for judicial review by the Office of Administrative Hearings and is pending a review.

Table 3. Enforcement related activities

	2015	2016	2017	2018	2019
No. of NOVs	31	17	15	0	20
No. of APs	0	13	0	0	5
Disciplinary Actions	0	0	0	0	2

E. General Goals and Objectives:

The certification program maintains a set of general objectives that are used to prioritize staff activities. The program continued to successfully meet these objectives in 2019. The program's general objectives include:

1. **Ensure public water treatment facilities have properly certified operators.** As discussed in section D of this report, the program tracks ORC assignments at all applicable water systems across the State. Upon completion of the annual renewal cycle, a report is submitted to regional office staff which indicates any system whose ORC was expired for either failure to pay renewal fees or lack of accrual of professional growth hours for the year. To assist systems with ORC placement, the program provides lists of available operators, upon request, to any water system attempting to fill a vacancy.
2. **Certify water treatment facility operators by examination.** Traditional examinations are held across the State on a quarterly basis. In addition, three electronic exams are offered in the interim. In 2019, the certification program administered 1,724 examinations with an overall pass rate of 56 percent for all certifications combined.
3. **Provide logistical support for the Board.** Program staff supports the Board by conducting its routine business and functioning as secretary during the Board's quarterly meetings. Activities typically include logistics and support, which include compiling statistical reports, preparing documents, creating meeting agendas and providing input on policy decisions.
4. **Provide online availability of operator records and information.** Certified operators expect and are provided information that is continually updated and delivered via the program's website. Information of interest includes forms and publications, rule reference materials, course offerings for approved schools and professional growth, and monthly updates on operator status. Additional access to operator records is afforded through an operator portal developed to allow individuals to establish secure accounts and access information related to their certifications.
5. **Review and preapproval of courses for professional growth.** Certification program staff review requests from external vendors and trainers for approval of professional growth opportunities for the State's operators. To date, the program has approved more than 3,500 courses for professional growth.
6. **Maintain operator records.** The program maintains an IBEAM database to permanently record activities related to licensure. Information includes a history of exams taken, schools completed, professional growth hours earned, personal/contact information, active certifications, ORC appointments, and fees paid to the Board.
7. **Manage the annual operator renewal process.** The certification program coordinates the annual renewal process for approximately 7,600 professional certifications in the State. The renewal process includes billing, processing fees, verifying professional growth hours, updating database records and expiring ineligible operators. The process is intensive, but has been noticeably improved with the introduction of electronic payment options. Wallet cards are printed and mailed to operators at the end of the renewal process.

F. Notable Achievements in 2019:

1. For the 2019 year-end renewal cycle, operators were again offered the convenience of an electronic payment option. Electronic payment increases the efficiency of payment processing. Approximately 30 percent of certified operators utilized the option to submit payment via credit card or electronic check.
2. During 2019, 748 individuals registered to use the operator portal to access personal and professional information regarding their certifications. Accessible data includes program updates, contact information, payments and account information, and professional growth hours. The portal also serves as a link to the electronic payment system developed by NC DEQ (see item 1, above). At present, more than 3,300 individuals utilize the portal.
3. The program's web pages are consistently evaluated and revised to improve their usability for operators, training providers, and other interested parties. The website can be found at: <http://deq.nc.gov/about/divisions/water-resources/operator-certification>.

G. Anticipated Program Improvements and Recommendations for 2020:

1. Program staff continues to perform audits of professional growth activities across the State. Staff seek out training classes and perform audits with regard to content and delivery. During this reporting period, six classes and three individual training providers were audited, including several online providers. Written audit reports were submitted to all providers and feedback was positively received.
2. Proposed enhancements to the electronic payment system will include multiple payment options (i.e., more than one invoice paid at a time) and electronic uploading of payment data to the operator database.
3. The most significant potential for improvement to the certification program continues to be via IT initiatives and solutions. Such improvements are consistent with the division's instructions to identify and implement program efficiencies. In 2020, the program intends to continue pursuit of the following:
 - a. Development of a consolidated database for managing all certified operator information. The database will house information on both drinking water and wastewater operators and will facilitate automated document generation and archiving procedures.
 - b. Development of the infrastructure and process to offer "on demand" examinations. Operators frequently inquire about the possibility of taking an examination outside the times of the program's published schedule. An on-site computer lab is operational, and has been utilized for exam administration.
 - c. Conversion of all program applications and forms to online, fillable documents and to potentially allow for electronic submittal. Additionally, all documents are being evaluated for consistency across programs (drinking water and wastewater) and will be consolidated where appropriate.

The improvements listed above will increase the efficiency of efforts required by staff as well as benefit the State's operators.