

Danny Sloan, Chairman  
Statesville

David Schaad Ph.D.  
Durham

Leslie Carreiro  
Asheville

Wendell Pickett  
High Point



North Carolina  
Water Treatment Facility  
**Operators Certification Board**  
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Scott A. Stevens, P.E.  
Goldsboro

Steve Scruggs, P.E.  
Raleigh

Linda Raynor  
Raleigh

Charles Brown  
Mount Olive

March 24, 2016

**MEMORANDUM**

TO: Donald R. van der Vaart  
DEQ Secretary

FROM: Danny Sloan, Chairman *Danny Sloan*  
North Carolina Water Treatment Facility  
Operators Certification Board

THROUGH: Jay Zimmerman, Director  
Division of Water Resources

SUBJECT: 2015 Annual Report to the Governor

I have attached our 2015 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 Governor McCrory as appropriate.

Thank you for your interest in the Certification Board activities.

cc: Jay Zimmerman  
Jessica Godreau  
Steve Reid  
Lucia Woodlief

Attachments

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March 24, 2016

The Honorable Pat McCrory  
Governor of North Carolina  
State Capitol  
Raleigh, North Carolina 27611

Dear Governor McCrory:

Please find attached the 2015 Annual Report to the Governor 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 telephone number 704-876-0672 ext. 106.

Thank you for your time and attention.

Sincerely,

A handwritten signature in cursive script that reads "Danny Sloan".

Danny Sloan, Chairman  
North Carolina Water Treatment Facility  
Operators Certification Board

Attachments

cc: Donald R. van der Vaart, DEQ Secretary

North Carolina

Water Treatment Facility Operators Certification Board

2015 Annual Report

To the Honorable Pat McCrory  
Governor of North Carolina

Prepared by:

Steve Scruggs, Second Vice-Chair  
NCWTFOCB

## NCWTFO Certification Board 2015 Annual Report

### *A. Description of Program:*

In 1969 the General Assembly passed the law providing for the professional certification of water treatment facility operators. NCGS 90A-20 through 90A-32 provide for the establishment of the Water Treatment Facility Operators Board of Certification, 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 serves the NC Water Treatment Facility Operators Certification Board (NCWTFOCB). The Program supports staff that includes education and training specialists as well as administrative support. Program staff are located within the Public Water Supply Section of the Division of Water Resources. Staff perform a variety of functions that include: administering statewide examinations, approving continuing education opportunities, managing database and state records, providing training and outreach, depositing 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 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 trainings 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. In recent

years, unspent funds remaining at the end of the fiscal year have been transferred to the General Assembly. This situation has resulted in difficulty budgeting for items that are necessary to improve the program (such as IT applications and database updates).

Table 1. Historical financial data (dollars)

<b>Financial Indicator:</b>	<b>FY2011</b>	<b>FY2012</b>	<b>FY2013</b>	<b>FY2014</b>	<b>FY2015</b>
<b>Projected Budgetary Needs</b>	291,655	303,226	306,458	306,458	310,144
<b>Actual Expenses</b>	263,059	286,984	282,963	250,609	265,080
<b>Actual Fee Receipts</b>	291,175	292,570	292,300	297,660	301,570

*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.

For the most part, the state’s community of certified operators has remained consistent for the past five years, as shown below in Table 2. The current number of operators appears adequate to meet demand. It is interesting to note that the total number of regulated public water supply systems tends to decrease over time. This is likely due to consolidation of water systems across the state.

Table 2. Trend indicators regarding certified operators

<b>Trend Indicator:</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>
<b>No. of Certified Operators</b>	5,209	5,017	5,405	5,523	5,519
<b>Initial Certifications Issued</b>	412	258	274	267	279
<b>Upgraded Certifications Issued</b>	288	314	293	314	324
<b>No. of Operators Decertified</b>	300	487	344	360	347

*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 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.

The Certification Board has authority to take disciplinary action and revoke certifications in

cases where negligence, operator incompetence, or criminal activity has occurred. Such cases are rare and no disciplinary actions were levied against operators in 2015.

Table 3. Enforcement related activities

<b>Enforcement Indicator:</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>
<b>No. of NOVs</b>	31	36	34	22	31
<b>No. of APs</b>	9	6	9	3	0
<b>Disciplinary Actions</b>	0	1	0	0	0

*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 2015. 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. To assist 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. The examination procedure is intensive, with major focus on security and maintaining the integrity of the exam. In 2015, the certification program administered 1485 examinations. The passing rate averaged across all exam categories was 53%.
3. Provide logistical support for the NCWTFOC Board. Program staff support 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 information for operators. 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 continuing education, information regarding approved schools, and monthly updates on operator status.
5. Review and preapprove courses for continuing education. The certification program reviews requests from vendors and trainers to approve educational opportunities for the state’s operators. To date, the program has reviewed material and instructor qualifications to approve more than 3,000 courses for professional growth.
6. Maintain operator records. The certification 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. In addition, paper documents are scanned and

maintained in electronic format in accordance with existing records and retention policy. Keeping records current and accessible is a major activity of the certification program.

7. Manage the annual operator renewal process. The certification program coordinates the annual renewal process for approximately 7,400 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 and typically requires direct contact with many of the state's operators. Wallet identification cards are printed and mailed to all operators at the end of the renewal process.

#### *F. Notable Changes and Achievements in 2015:*

1. During calendar year 2105, the *Rules Governing Water Treatment Facility Operators* (15A NCAC 18D) were examined and categorized to identify improvements and options related to repeal/readoption pursuant to NC House Bill 74, which required all State agencies to undergo the rule review process. Reports were submitted to the Rules Review Commission (RRC) in November of 2015 and the RRC granted a final readoption deadline of November 2018. Stakeholders input meetings and staff revisions to the Rule will commence in mid-2016.
2. For the year-end renewal cycle, operators were able to utilize an electronic payment option. Approximately 14% of the 5,519 certified operators utilized the option to submit payment either via credit card or electronic checking. Proposed enhancements to the program include multiple payment options (more than one invoice paid at a time) and electronic uploading of payment data to the operator database.
3. A project was completed to allow operators to access their information and data through a web-based portal. Information available includes program updates, contact information, payments and account information, and professional growth hours. This portal also serves as a link to the electronic payment system developed by NC DEQ (see item 2, above).
4. Program web pages were consolidated with animal waste and wastewater operator pages to allow for more consistency and ease of access for all operators and to comply with the newly mandated look for all state agency sites. The new web content can be found at: <http://deq.nc.gov/about/divisions/water-resources/wastewater-operator-certification>.

#### *G. Anticipated Program Improvements and Recommendations for 2016:*

1. The *Rules Governing Water Treatment Facility Operators* (15A NCAC 18D) will continue to be evaluated to identify candidates for rule improvement and adoption. There is an opportunity for greater clarification as well as insertion of new rule language to better serve the state's certified operators. Comparison with the wastewater operator rules (15A NCAC 08G) will attempt to incorporate more consistencies between the two sets of rules. Changes in rules related to system classification are anticipated to reflect changes in treatment technology.

2. The most significant potential for improvement to the certification program is likely to be via IT initiatives and solutions. Such improvements are consistent with the Division's instructions to identify and implement program efficiencies. In 2016, the program intends to pursue the following:

- a) Initiate "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 nearing completion, and it is our intent to utilize it for on demand testing by mid-2016.
- b) Efforts to consolidate the exam grading process for water and wastewater certification exams are nearing completion, including the completion of a standardized answer sheet to be used across the programs and procurement of a new grading scanner. The new exam grading system will automatically produce files for correspondence and digital records to further streamline filing requirements.
- c) Development of a consolidated database for managing operator information. The new database will house information on both drinking water and wastewater operators and will facilitate document generation and archiving procedures.
- d) An effort is underway to convert all applications and forms to online fillable documents and to potentially allow for electronic submittal of those documents.