

# 28<sup>th</sup> Annual North Carolina Waterworks Operators Spring School

April 16-20, 2018

## Including Advanced Day

Wednesday, April 18, 2018



## Hickory Metro Convention Center - Hickory, NC - NEW LOCATION!!

*Presented by the North Carolina Waterworks Operators Association with the cooperation and sponsorship of the North Carolina Department of Environmental Quality, Division of Water Resources, Public Water Supply Section*

### Class Schedule for B & C Well and A, B & C Surface

#### Monday, April 16, 2018

1:00pm - 1:30pm Registration, Hickory Metro Convention Center  
1:30pm - 2:00pm General Session, Hickory Metro Convention Center  
2:00pm - 5:00pm Classes - Report to your assigned room

#### Tuesday, April 17, 2018

8:00am - 5:00pm Classes - Report to your assigned room. Lunch will be provided.

#### Wednesday, April 18, 2018

8:00am - 4:00pm **EXHIBITS!!!** Exhibit Hall open during Lunch and Breaks  
8:00am - 5:30pm Classes - Report to your assigned room. Lunch will be provided.  
7:00pm - 9:00pm Review - La Quinta Inn & Suites

#### Thursday, April 19, 2018

8:00am - 5:00pm Classes - Report to your assigned room. Lunch will be provided.

#### Friday, April 20, 2018

8:00am - 12:00pm Classes - Report to your assigned room.  
12:00pm Certificates of Attendance Awarded

See page 5 for specific topics being **REVIEWED** in your class. Exact class agenda will be handed out at registration on Monday, April 16, 2018 for B & C Well and A, B & C Surface.

School **REGISTRATION FORM** must be received on or before **April 5, 2018**. Applications accepted on a first-come, first-served basis. Class sizes are limited.

**Host hotel will be the  
LaQuinta Inn & Suites**

*(1607 Fairgrove Church Rd, Conover, NC 28613 - exit 128 off of I-40  
Hickory Metro Convention Center is exit 125)*



## CHECKLIST

The following checklist is provided for your use to insure that you have taken the necessary actions to attend the School and be qualified to take the Exam.

- Send Class Registration Form (see page 7) and payment for the SCHOOL to:  
Cindy Gall, Comptroller  
NCWOA  
PO Box 4519, Emerald Isle, North Carolina 28594  
Phone: 252-764-2094 ext 2  
Fax: 252-764-2095  
Email: cindy@ncwoa.com

Make check payable to: "NCWOA" or "North Carolina Waterworks Operators Association"  
**Registration must be received by April 5, 2018.**

- Send EXAM APPLICATION and check for \$50.00 to the NCWTFO Certification Board:  
Visit the NCWTFO website for the electronic, apprentice or regular exam applications:  
<http://deq.nc.gov/about/divisions/water-resources/operator-certification/drinking-water-operator-certification/dw-operator-certification-exams>. Phone: 919-707-9040

If you wish to take the exam on May 31, 2018, your exam application must be postmarked no later than May 1, 2018.

- Make hotel reservations – **HOST HOTEL IS THE LAQUINTA INN & SUITES**  
**To make reservations, call 828-465-1100. Guest should request group NC Waterworks Operators Association.**  
Deadline for special group rate is April 2, 2018.
- Order study materials (see pages 9-10). All exam questions are taken from the books listed in Part I on page 9 for surface exams & page 10 Part I for well exams.
- Individuals registering for the Lab Analyst Voluntary Certification Exam (Process Chemistry or Bacteriology), please refer to page 11.
- Read and study recommended materials. **Be sure to bring a calculator to ALL classes.**

Water Treatment Facility Operators Certification Board's 2018 Examination Schedule for Cross-Connection and All Levels of Surface, Well and Distribution. (Contact the Certification Board for dates & sites for electronic testing.)

### Dates of Exams:

Last Thursday of:  
October  
February  
May  
August

### Usual Location of Exams:

Lenoir Community College in **Snow Hill**  
McKimmon Center in **Raleigh**  
Collett Community Center in **Morganton**



## HOTEL ACCOMMODATIONS

A block of rooms has been reserved in the name of the North Carolina Waterworks Operators School at the LaQuinta Inn & Suites in Hickory. Be sure to tell reservations that you will be attending the Waterworks Operators School.

### LaQuinta Inn & Suites (headquarters)

1607 Fairgrove Church Rd (exit 128),  
Hickory, NC 28613, (828) 465-1100

Rate: Single: \$85.00 plus tax

Double: \$85.00 plus tax.

**Group rate deadline is April 2, 2018**

*Hot breakfast included.*

|            |                               |
|------------|-------------------------------|
| \$ 85.00   | Single or Double Rate         |
| + \$ 11.05 | 13% Room Tax                  |
| <hr/>      |                               |
| \$ 96.05   | Single or Double Rate / Night |

### LAQUINTA INN & SUITES POLICIES

#### Payment by Check:

Hotel advises to have the check made out for the exact amount of room and tax for stay and use a debit/credit card for the incidentals.

#### Payment using debit/credit card:

Hotel does not allow anyone to use any form of payment which does not bear their name; regardless of if they are an authorized user on the account or not. La Quinta Inn & Suites system will automatically authorize the full amount of room and tax for all nights and an additional 10% of total costs, at check-in for incidental purposes. Any authorizations placed on guest credit/debit card may take up to 14 days to fully process--hotel staff does not have ability to release/remove/lessen any holds placed by merchant system.

Best Western at exit 125, (828) 323-1150

\$85.00 exterior king or double

\$90.00 interior king or double

*(room block - mention NCWOA  
cutt off date - April 2, 2018)*

|            |                       |            |                       |
|------------|-----------------------|------------|-----------------------|
| \$ 85.00   | Exterior Room Rate    | \$ 90.00   | Interior Room Rate    |
| + \$ 11.05 | 13% Room Tax          | + \$ 11.70 | 13% Room Tax          |
| <hr/>      |                       |            |                       |
| \$ 96.05   | Exterior Rate / Night | \$101.70   | Interior Rate / Night |

#### Other hotels in Hickory (Call for rates)

Crown Plaza at exit 125, (828) 323-1000

Holiday Inn Express Hickory at exit 126, (828) 328-2081

## MEETING SITES

All classes and Advance Day will be held at Hickory Metro Convention Center in Hickory. (1960 13<sup>th</sup> Avenue Drive SE - Hickory, NC 28602). Maps with confirmation/receipts will be mailed to all paid in full students.

If you **DO NOT** get a confirmation/receipt by April 9, 2018, call (252) 764-2094 ext. 2.

## WANT TO BE BETTER PREPARED TO TAKE YOUR CERTIFICATION EXAM?

### *Online Supplement for Certification Exam Review*

All attendees of NCWOA Certification Schools will be eligible to enroll in an online course that will supplement and enhance the materials presented in the week-long class. The online supplement is an optional, web based Moodle class that includes multiple practice tests, videos of worked math problems, copies of presentation materials for many of the topics presented in the week-long school, and additional materials that will help you prepare for the certification exam. The online supplement will be available by the first day of the week-long school and will be accessible until the day of the first traditional certification exam after the school.

*If you wish to participate in this program, please be sure that YOUR email address is included on your registration form. Please note the online supplement is optional.*

*Individuals who register for the week-long school will receive an email with directions on how to log in and access the class.*

# REGISTRATION INSTRUCTIONS & REQUIREMENTS

## SCHOOL REGISTRATION FORM

To be completed by ALL students. Please complete one form per person. Please print or type. This form must be accompanied by a payment for the correct registration fee. We accept checks, cash, credit cards & money orders. Please make checks or money orders payable to "NCWOA" or "North Carolina Waterworks Operators Association." We do not accept Purchase Orders. Please be sure to enter all information requested on the form. Incomplete forms will delay your registration or may be returned. All attendees must be pre-registered and paid in advance.

## CONFIRMATION/ACKNOWLEDGEMENT OF REGISTRATION

All participants who pre-register will receive a receipt/confirmation of their registration by postal mail. This acknowledgement will include specific information on the site and a map.

## CERTIFICATES OF ATTENDANCE OR COMPLETION

At the conclusion of the event all participants, who have attended at least 75% of their classes, will receive a Certificate of Attendance. These certificates will document attendance for professional growth contact hour requirements and/or successful class completion. Participants must pick up their own certificate at the conclusion of the event. No certificates will be given out early, to another individual, or mailed.

## REFUNDS

**Refunds will be issued (minus a \$25 administrative fee), if the refund is requested, in writing, by April 5, 2018.** Substitutions may be made. Please inform us as soon as possible of substitutions so appropriate certificates of attendance may be generated.

## PARTIAL SOCIAL SECURITY NUMBERS (SS#)

NCWOA's seminar attendance/contact hour tracking program uses your partial SS# as a unique identification number for our use only. We use this number to verify who you are and to communicate to the NC Water Treatment Facility Operators Certification Board when reporting your seminar attendance/contact hour record. We do NOT use your partial SS# for any other purpose. Your partial SS# will NOT be given out to anyone else. If you will not allow us to use your partial SS#, please indicate "refused" on the partial SS# line. We will be happy to register you, however, we cannot guarantee accurate tracking of your attendance at these events.

## MEMBER/NON-MEMBER STATUS

Only individuals who are current members of NCWOA are eligible for the member rate. Please refer to your membership card for your member #. We will verify registrations for eligibility and will return those who pay the incorrect amount. If you would like to become a member, please complete the membership application in this brochure and return with payment.

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## SURFACE & WELL REVIEW TOPICS

### A-SURFACE REVIEW TOPICS

Administration  
Bacteriology  
Coagulation & Flocculation  
Corrosion Control  
Disinfection & Disinfection By-Products  
Distribution & Cross-Connection  
Drinking Water Regulations & Rules  
Fluoridation  
Handling & Disposal of Process Wastes  
Instrumentation  
Iron & Manganese Removal  
Lab Procedures & Sample Collection  
Math  
Maintenance  
Plant Operations  
Pumps  
Safety  
Sedimentation & Filtration  
Taste & Odor  
WTP Operator & Reservoir Management

### B-SURFACE REVIEW TOPICS

Bacteriology  
Coagulation & Flocculation  
Corrosion Control  
Disinfection & Disinfection By-Products  
Distribution & Cross-Connection  
Drinking Water Regulations & Rules  
Fluoridation  
Handling & Disposal of Process Wastes  
Instrumentation

Iron & Manganese Removal  
Lab Procedures & Sample Collection  
Math  
Maintenance  
Plant Operations  
Pumps  
Safety  
Sedimentation & Filtration  
Taste & Odor  
WTP Operator & Reservoir Management

### C-SURFACE REVIEW TOPICS

Bacteriology  
Coagulation & Flocculation  
Corrosion Control  
Disinfection & Disinfection By-Products  
Distribution & Cross-Connection  
Drinking Water Regulations & Rules  
Fluoridation  
Iron & Manganese Removal  
Lab Procedures & Sample Collection  
Math  
Maintenance  
Plant Operations  
Pumps  
Safety  
Sedimentation & Filtration  
Taste & Odor  
WTP Operator & Reservoir Management  
Jar Testing

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### B-WELL REVIEW TOPICS

Pumps  
Instrumentation  
Bacteriology  
Iron & Manganese Removal  
Corrosion Control  
Lab Procedures & Sample Collection  
Disinfection & Disinfection By-Products  
Maintenance  
Distribution & Cross-Connection  
Math  
Drinking Water Regulations & Rules  
Membrane Processes  
Fluoridation  
Safety  
Groundwater Hydrology  
Softening  
Handling & Disposal of Process Waste  
Well Construction  
Well-Water Chemistry

### C-WELL REVIEW TOPICS

Pumps  
Bacteriology  
Corrosion Control  
Lab Procedures & Sample Collection  
Disinfection & Disinfection By-Products  
Maintenance  
Distribution & Cross-Connection  
Math  
Drinking Water Regulations & Rules  
Operation of Small Water Systems  
Groundwater Treatment Process  
Safety  
Groundwater Hydrology  
Softening  
Well Construction  
Well-Water Chemistry



# North Carolina Waterworks Operators Association MEMBERSHIP APPLICATION

MISSION STATEMENT: To provide knowledge, skills & educational opportunities for drinking water professionals; develop working relationships with other water treatment organizations; project a positive image and communicate the importance of safe drinking water.

## NEW OR RENEWAL MEMBERSHIP APPLICATION – ANNUAL DUES \$40.00 for 2018

First Name: \_\_\_\_\_ Middle Initial: \_\_\_\_\_ Last Name: \_\_\_\_\_

Nick Name: \_\_\_\_\_ Social Security #: XX-XXX-\_\_\_\_\_ If Renewal, what is your NCWOA Member #: \_\_\_\_\_

YOUR Individual Operator Certification #: (Issued by NCWTFOCB) \_\_\_\_\_

Certificate(s) Held:

\_\_\_\_ A-Surface    \_\_\_\_ B-Surface    \_\_\_\_ C-Surface    \_\_\_\_ A-Well    \_\_\_\_ B-Well    \_\_\_\_ C-Well    \_\_\_\_ D-Well

\_\_\_\_ A-Dist    \_\_\_\_ B-Dist    \_\_\_\_ C-Dist    \_\_\_\_ D-Dist    \_\_\_\_ Cross-Connection

\_\_\_\_\_ Wastewater #'s & certificate type

\_\_\_\_ None Yet    \_\_\_\_ You Are Not an Operator & Do Not Plan to Become Certified.

### PLEASE SELECT YOUR PREFERRED ADDRESS (This is where confirmations & membership info will be sent.)

\_\_\_\_ Home Address: \_\_\_\_\_

City: \_\_\_\_\_ State \_\_\_\_ Zip \_\_\_\_\_ County: \_\_\_\_\_

\_\_\_\_ Employer Name: \_\_\_\_\_

MAILING Address: \_\_\_\_\_

City: \_\_\_\_\_ State \_\_\_\_ Zip \_\_\_\_\_ County: \_\_\_\_\_

Work Phone: \_\_\_\_\_ Ext: \_\_\_\_\_ Fax: \_\_\_\_\_

Home Phone: \_\_\_\_\_ Cell Phone: \_\_\_\_\_

Email Address: \_\_\_\_\_

How would you like to receive your issues of Go With The Flow?    Email \_\_\_\_\_ or    Postal Delivery \_\_\_\_\_

How would you like to receive your Section Meeting notices?    Email \_\_\_\_\_ or    Postal Delivery \_\_\_\_\_

**\*NOTE:** Memberships are based upon a calendar year. Membership cards will be mailed with receipt. These cards will contain your name, membership number, and membership expiration date.

**By Credit Card:** \_\_\_\_ Visa    \_\_\_\_ MC    \_\_\_\_ Am Ex    \_\_\_\_ Discover

Name on Credit Card: \_\_\_\_\_

Credit Card Number: \_\_\_\_\_

Exp Date: Month \_\_\_\_ Year \_\_\_\_ Security Code from back of card: \_\_\_\_\_

Cardholder Signature: \_\_\_\_\_

### PLEASE SEND APPLICATION AND PAYMENT TO:

Cindy Gall, NCWOA Comptroller  
PO Box 4519  
Emerald Isle, NC 28594  
Phone: 252-764-2094 ext. 2  
Fax: 252-764-2095  
Email:cindy@ncwoa.com

If cardholder is other than member, what email address should the CC receipt be sent to? \_\_\_\_\_  
To ensure that you receive the emailed receipt, please add cindy@ncwoa.com to your email address book.

**NCWOA USE:** Amount \_\_\_\_\_ CK# \_\_\_\_\_ E S Processed \_\_\_\_\_



# NORTH CAROLINA WATERWORKS OPERATORS ASSOCIATION

## Spring School Registration Form

RECEIVED ON OR BEFORE APRIL 5, 2018

Please Print or Type

NAME (First, Middle, Last): \_\_\_\_\_

NICK NAME for TAG: \_\_\_\_\_ SOCIAL SECURITY #: XX-XXX-\_\_\_\_\_

EMPLOYER / ORGANIZATION: \_\_\_\_\_

ADDRESS FOR CONFIRMATION & MAP: \_\_\_\_\_

CITY: \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_ COUNTY: \_\_\_\_\_

WORK PHONE: \_\_\_\_\_ EXT: \_\_\_\_\_ FAX: \_\_\_\_\_

ATTENDEE'S EMAIL: \_\_\_\_\_

*(Be sure to include if you would like access to NCWOA Moodle On-line supplement. Moodle log in and istructions will be sent to this email address.)*

ATTENDEE'S INDIVIDUAL NCWOA MEMBER # *(must be included to be eligible for member rate)*: \_\_\_\_\_

NC WATER TREATMENT CERTIFICATE TYPE PRESENTLY HELD:

- AW     BW     CW     DW     AS     BS     CS
- AD     BD     CD     DD     CC/BF     NONE YET

NC WATER TREATMENT CERTIFICATE # (OPERATOR ID #): \_\_\_\_\_

WASTEWATER CERTIFICATION # \_\_\_\_\_

PLEASE **CHECK** WHICH CLASS YOU ARE REGISTERING FOR AND **CIRCLE** RATE:

| <u>CLASS TITLE</u>                                | <u>NCWOA MEMBER RATE</u> | <u>NON-MEMBER RATE</u> |
|---|--------------------------|------------------------|
| <input type="checkbox"/> A-Surface (M-F)          | \$ 225.00                | \$ 275.00              |
| <input type="checkbox"/> B-Surface (M-F)          | \$ 225.00                | \$ 275.00              |
| <input type="checkbox"/> C-Surface (M-F)          | \$ 225.00                | \$ 275.00              |
| <input type="checkbox"/> B-Well (M-F)             | \$ 225.00                | \$ 275.00              |
| <input type="checkbox"/> C-Well (M-F)             | \$ 225.00                | \$ 275.00              |
| <input type="checkbox"/> Advanced Day (Wednesday) | \$ 120.00                | \$ 150.00              |

By Credit Card: \_\_\_ Visa \_\_\_ MC \_\_\_ Am Ex \_\_\_ Discover

Name on Credit Card: \_\_\_\_\_

Credit Card Number: \_\_\_\_\_

Exp Date: Month \_\_\_ Year \_\_\_ Security Code from back of card: \_\_\_\_\_

Cardholder Signature: \_\_\_\_\_

PLEASE SEND APPLICATION AND PAYMENT TO:

Cindy Gall, NCWOA Comptroller  
 PO Box 4519  
 Emerald Isle, NC 28594  
 Phone: 252-764-2094 ext. 2  
 Fax: 252-764-2095  
 Email:cindy@ncwoa.com

If cardholder is other than attendee, what email address should the CC receipt be sent to? \_\_\_\_\_

To ensure that you receive the emailed receipt, please add cindy@ncwoa.com to your email address book.

NCWOA USE: Amount \_\_\_\_\_ CK# \_\_\_\_\_ E S Processed \_\_\_\_\_





# NORTH CAROLINA WATERWORKS OPERATORS ASSOCIATION

## Advanced Day Agenda

Wednesday, April 18, 2018

Hickory, NC

### Keeping it Safe and Secure: Facility, SCADA, and our Most Valuable Resource, Employees

#### **EXHIBIT HALL OPEN FROM 8:00AM - 4:00PM**

##### **Session 1**

|                    |   |
|--------------------|---|
| 8:30 am – 8:40 am  | Welcome and Opening Remarks - <i>NCWOA Representative</i> |
| 8:40 am – 9:25 am  | The Importance of Vulnerability Assessments               |
| 9:25 am – 10:15 am | Physical Asset Security                                   |

##### **Break: 10:15 - 10:45**

##### **Session 2**

|                     |  |
|---------------------|--|
| 10:45 am – 11:15 am | Hardening Our Facilities, a Case Study   |
| 11:15 am – 12:15 pm | Panel/Roundtable – Vulnerability Assessments Implementation - What to do with the Information! |

##### **Lunch – Provided on Site 12:15 – 1:30**

##### **Session 3**

|                   |   |
|-------------------|---|
| 1:30 pm – 2:15 pm | Cyber Security – What are the Risks to our Networks and SCADA |
| 2:15 pm – 3:00 pm | Cyber Security – Protecting our Networks and SCADA            |

##### **Break: 3:00 – 3:20**

##### **Session 4**

|                   |  |
|-------------------|--|
| 3:20 pm – 3:50 pm | The Practical Application of Cyber Security, a Case Study                                    |
| 3:50 pm – 4:50 pm | Panel / Round Table Discussions – Cyber Security - Mistakes – Guidelines to Improve Security |
| 4:50 pm           | Certificates awarded   |

This class has been pre-approved for 6 contact hours for drinking water and/or wastewater certification.



# Surface Water Systems - Book Order Form

Circle Material You Wish to Order  
Form not valid after June 30, 2018

| A, B, or C Surface Study Material  | NCWOA Member Price | Non-Member Price |
|--|--------------------|------------------|
| Water Treatment Plant Operator Vol. 1 (6th Edition)                              | \$61.00            | \$66.00          |
| Water Treatment Plant Operator Vol. 2 (6th Edition)                              | \$61.00            | \$66.00          |
| "Needs to Know" - A Study Outline for Water Plant Operators (2015)               | \$6.00             | \$11.00          |
| Rules Governing Public Water Supplies (Green Book) (2015)                        | \$16.00            | \$21.00          |
| Rules Governing Water Treatment Facility Operators (Blue Book) (12/2012)         | \$4.00             | \$9.00           |
| Entire set that includes all of the above needed for the A, B, or C Surface Exam | \$148.00           | \$173.00         |

| Lab Procedures Books <i>(Not Required for A-C Surface Exams)</i>  | NCWOA Member Price | Non-Member Price |
|---|--------------------|------------------|
| Basic Lab Procedures for Waterworks (2/2007)                      | \$13.00            | \$18.00          |
| Bacteriological Methods for the Analysis of Drinking Water (2011) | \$51.00            | \$56.00          |

Subtotal: \_\_\_\_\_

*Prices include NC Sales Tax.*

| Add Shipping and Handling Charges: |         |
|------------------------------------|---------|
| For Book Order Totals              | Add     |
| Up to \$20.00                      | \$6.00  |
| \$20.01 - \$40.00                  | \$8.00  |
| \$40.01 - \$60.00                  | \$9.00  |
| \$60.01 - \$80.00                  | \$10.00 |
| \$80.01 - \$100.00                 | \$11.00 |
| \$100.01 & Over                    | Add 12% |

**Total Amount Due (book charges + S/H charges) \$** \_\_\_\_\_

Employee Name: \_\_\_\_\_ NCWOA Member #: \_\_\_\_\_

Employer Name: \_\_\_\_\_

Address to **MAIL** Books To: \_\_\_\_\_

City, State, Zip Code: \_\_\_\_\_ County: \_\_\_\_\_

Phone: \_\_\_\_\_

**\*Note:** Most book orders will be mailed to you within 3 business days from the time of receipt by NCWOA. If you have not received your order within 10 days of the date you sent your request, please contact me at the number listed below.

**\*\*Note:** Please make checks payable to: "North Carolina Waterworks Operators' Association" or "NCWOA". We accept Checks, Cash, Money Orders or Credit Card. We do NOT accept Purchase Orders. Credit Card payments may be mailed, faxed or scanned but will not be taken over the phone.

**By Credit Card:**  Visa  MC  Am Ex  Discover

**PLEASE SEND APPLICATION AND PAYMENT TO:**

Name on Credit Card: \_\_\_\_\_

Cindy Gall, NCWOA Comptroller  
PO Box 4519  
Emerald Isle, NC 28594  
Phone: 252-764-2094 ext. 2  
Fax: 252-764-2095  
Email: cindy@ncwoa.com

Credit Card Number: \_\_\_\_\_

Exp Date: Month \_\_\_\_\_ Year \_\_\_\_\_ Security Code from back of card: \_\_\_\_\_

Cardholder Signature: \_\_\_\_\_

If cardholder is other than member, what email address should the CC receipt be sent to you? \_\_\_\_\_

To ensure that you receive the emailed receipt, please add cindy@ncwoa.com to your email address book.

**NCWOA USE:** Amount \_\_\_\_\_ CK# \_\_\_\_\_ E S Processed \_\_\_\_\_

# Well Water Systems - Book Order Form

Circle Material You Wish to Order  
Form not valid after June 30, 2018

| A, B, or C Well Study Material  | NCWOA Member Price | Non-Member Price |
|---|--------------------|------------------|
| Water Treatment Plant Operator Vol. 2 (6th Edition)                                       | \$61.00            | \$66.00          |
| Small Water System Operations & Maintenance (5th Edition)                                 | \$61.00            | \$66.00          |
| Ground Water "Needs to Know" - A Certification Study Guide for Groundwater Systems (2015) | \$6.00             | \$11.00          |
| Rules Governing Public Water Supplies (Green Book) (2015)                                 | \$16.00            | \$21.00          |
| Well Construction Standards (Red Book) (10/2009)  | \$6.00             | \$11.00          |
| Rules Governing Water Treatment Facility Operators (Blue Book) (12/2012)                  | \$4.00             | \$9.00           |
| Entire set that includes all of the above needed for the A, B, or C Well Exam             | \$154.00           | \$184.00         |

| Lab Procedures Books <i>(Not Required for A-D Well Exams)</i>     | NCWOA Member Price | Non-Member Price |
|---|--------------------|------------------|
| Basic Lab Procedures for Waterworks (02/2007)                     | \$13.00            | \$18.00          |
| Bacteriological Methods for the Analysis of Drinking Water (2011) | \$51.00            | \$56.00          |

Subtotal: *(Prices include NC Sales Tax)* \_\_\_\_\_

| Add Shipping and Handling Charges: |         |
|------------------------------------|---------|
| For Book Order Totals              | Add     |
| Up to \$20.00                      | \$6.00  |
| \$20.01 - \$40.00                  | \$8.00  |
| \$40.01 - \$60.00                  | \$9.00  |
| \$60.01 - \$80.00                  | \$10.00 |
| \$80.01 - \$100.00                 | \$11.00 |
| \$100.01 & Over                    | Add 12% |

**Total Amount Due (book charges + S/H charges) \$** \_\_\_\_\_

Employee Name: \_\_\_\_\_ NCWOA Member #: \_\_\_\_\_

Employer Name: \_\_\_\_\_

Address to **MAIL** Books To: \_\_\_\_\_

City, State, Zip Code: \_\_\_\_\_

County: \_\_\_\_\_ Phone: \_\_\_\_\_

**\*Note:** Most book orders will be mailed to you within 3 business days from the time of receipt by NCWOA. If you have not received your order within 10 days of the date you sent your request, please contact Cindy Gall.

**\*\*Note:** Please make checks payable to: "North Carolina Waterworks Operators' Association" or "NCWOA". We accept Checks, Cash, Money Orders or Credit Card. We do NOT accept Purchase Orders. Credit Card payments may be mailed, faxed or scanned but will not be taken over the phone.

**By Credit Card:**  Visa  MC  Am Ex  Discover

**PLEASE SEND APPLICATION AND PAYMENT TO:**

Name on Credit Card: \_\_\_\_\_

Cindy Gall, NCWOA Comptroller  
PO Box 4519  
Emerald Isle, NC 28594  
Phone: 252-764-2094 ext. 2  
Fax: 252-764-2095  
Email: cindy@ncwoa.com

Credit Card Number: \_\_\_\_\_

Exp Date: Month \_\_\_\_\_ Year \_\_\_\_\_ Security Code from back of card: \_\_\_\_\_

Cardholder Signature: \_\_\_\_\_

If cardholder is other than member, what email address should the CC receipt be sent to you? \_\_\_\_\_

To ensure that you receive the emailed receipt, please add cindy@ncwoa.com to your email address book.

**NCWOA USE:** Amount \_\_\_\_\_ CK# \_\_\_\_\_ E S Processed \_\_\_\_\_

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NORTH CAROLINA WATERWORKS OPERATORS ASSOCIATION

**Examination for Laboratory Analyst Certification  
Water Bacteriology OR Water Process Control Chemistry**

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**OBJECTIVE:** The North Carolina Waterworks Operators Association is sponsoring a voluntary certification program for laboratory analysts. Certification will be given in the area of water process control chemistry.

Upon completion of a written examination, the analyst will receive a certificate. The certificate must be renewed every five years.

**Water Bacteriology Examination Content:** The examination will cover sampling techniques, quality control and media, equipment and techniques used in the water bacteriology laboratory. Knowledge of the Multiple Tube Fermentation Procedure, Membrane Filter Procedure, Colilert Procedure and Standard Plate Count Procedure is required.

**Water Process Control Chemistry Examination Content:** The examination will include safety, sampling techniques, conductivity, hardness, turbidity, chlorine, and selective electrode and spectrophotometric techniques.

**EXAMINATION DATE:** Wednesday, April 18, 2018 at 6:00 PM

**PLACE:** *Hickory Metro Convention Center - 1960 13<sup>th</sup> Avenue Drive SE - Hickory, NC 28602*

**APPLICATION DEADLINE:** April 11, 2018

**FEE:** \$20.00 (*Payable at time of the examination.*) Payment must be made by check or money order to: North Carolina Waterworks Operators Association (NCWOA) - NO CASH WILL BE ACCEPTED.

**HOW TO APPLY:** Each applicant must complete the application below, detach, and send to:

Drinking Water Lab Certification  
Environmental Sciences Section  
Attn: Tiffany Kohl  
PO Box 28047  
Raleigh, NC 27611-8047  
Phone #: 919-807-8879  
Fax #: 919-715-8611

DO NOT SEND FEE WITH APPLICATION

All applications will be accepted. No acceptance notification will be mailed. For additional information, contact Chris Goforth at 919-807-8871.

DETACH HERE AND RETURN

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Name: \_\_\_\_\_

Preferred Mailing Address: \_\_\_\_\_

City, State, Zip Code: \_\_\_\_\_

Employer: \_\_\_\_\_

Address: \_\_\_\_\_  
Street or PO City State Zip Code

Please mark the examination you would like to take: ( ) Bacteriology ( ) Process Control Chemistry

Applicants Signature: \_\_\_\_\_

Heather Cagle, Administrator  
N.C. Waterworks Operators Association  
PO Box 4519  
Emerald Isle, NC 28594

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