



*Laws & Regs
for Wastewater Treatment Plant
Operators*

2020



Rules

- Point Source Discharges to Surface Waters
 - 15A NCAC 02H .0100
- Waste Not Discharged to Surface Waters
 - 15A NCAC 02T .0100
- Surface Water Monitoring & Reporting
 - 15A NCAC 02H .0500
- Laboratory Certification
 - 15A NCAC 02H .0800
- Pretreatment Programs
 - 15A NCAC 02H .0900
- WW Operators
 - 15A NCAC 08G

Department of Environmental Quality



Program Organization...

- EPA
 - NC DEQ
 - NC DWR
 - Central Office
 - Regional Offices
 - Permittee



Operator

NPDES

- National Pollutant Discharge Elimination System
- Result of the 1972 Clean Water Act
- Major goal - reduce or eliminate pollutants



- Federal Water Pollution Act of 1972
- PL 92-500 (Clean Water Act) gives EPA authority to:
 - regulate discharges
 - define control technologies
 - establish effluent limitations
 - obtain information
 - reporting & inspections
 - take enforcement actions



- The Clean Water Act authorizes inspections & monitoring to determine compliance
- Two types of monitoring:
 - Self-monitoring- facility monitors itself & reports via DMRs
 - Compliance monitoring- regulatory agency reviews self monitoring & inspects facilities



- The Act provides for transfer of the NPDES program to the States
- NC Agency responsible for NPDES program
 - Division of Water Resources (DWR)
 - Department of Environmental Quality (DEQ)
 - Authority delegated in 1975
 - EPA retains oversight (Region IV)



- Three main categories of pollutants
 - Oxygen-consuming & conventional
 - Toxicants & non-conventional
 - Nutrients & parameters related to eutrophication



- Oxygen-consuming
 - BOD5
 - NH3
 - TSS
- Conventional
 - Fecal coliform
 - Temperature
 - pH
 - Oil & Grease



- Toxicants & “Non-conventional”

- Metals

- Cadmium
 - Chromium
 - Copper
 - Nickel
 - Lead
 - Zinc
 - Cyanide
 - Mercury
 - Arsenic
 - Silver
 - Selenium

- Volatile & semi-volatile organics



- Nutrients related to eutrophication
 - Phosphorus
 - Nitrogen



- *Eutrophication*

- *enrichment of water by nutrients causing an accelerated growth of algae & higher forms of plant life to produce an undesirable disturbance to the balance of organisms present in the water*



- The five basic NPDES monitoring parameters
 - Flow
 - BOD
 - TSS
 - pH
 - Fecal Coliform



- Permits establish:
 - effluent limits
 - requirements for O&M, monitoring, reporting & record keeping
 - penalties for violations



- Permittees include:
- Municipal, state or other public entity
 - principal executive officer, ranking elected official, or authorized employee
- Corporations
 - principal executive officer or an authorized representative
- Partnership
- Sole proprietorship

- *The permittee is responsible for understanding & meeting all permit requirements*



Enforcement Actions

- Most common enforcement actions are for:
 - Violations of permit limits, conditions & monitoring requirements
 - Not having permit or late renewal
 - Violations of stream standards
 - Intentional or flagrant permit violations
 - Construction without permit



- Other reasons for enforcement
 - Fish Kills
 - Late/non submittal of DMR's
 - Improperly certified laboratory
 - Discharge of oil or hazardous substances
 - Violation of permit conditions other than limits & monitoring frequency
 - Failure to designate appropriate certified operators



- Actions consist of a “Notice of Violation” to the permittee
- The NOV *may* include a civil/criminal penalty
 - \$\$\$ fine
 - depends on nature/severity of the violation



- Purpose of an NOV:
 - Inform permittee that violation has been observed
 - Cause violation to cease
- NOV's usually issued for:
 - limit violations
 - results of compliance inspections
 - failure to monitor at required frequency



- Violations of monthly avg permit limit by >20% of the limit
 - *may* result in civil penalty
- Penalties may be assessed against permittee
 - Up to \$25,000 per day of violation
- Enforcement may be taken by the NC DWR *and/or* EPA



Point Source Discharges to the Surface Waters (02H .0100)



- What are surface waters?
Any stream, river, brook, swamp, lake, sound, tidal estuary, bay, creek, reservoir, waterway, or other body or accumulation of water, whether surface or underground, public or private, natural or artificial, that is contained in, flows through, or borders upon any portion of this State, including any portion of the Atlantic Ocean over which this State has jurisdiction

- NPDES permitted systems discharging to waters of the state
- Applications for permit renewals must be filed at least 180 days prior to the expiration of the permit
- \$\$\$ fees required



- NPDES permit subject to revocation or modification for:
 - Violation of terms or conditions
 - Obtaining permit by misrepresentation
 - A change in any condition that requires a reduction or limitation of the permitted discharge
 - Refusal to permit authorized representatives
 - To enter the premises where an effluent source is located
 - To have access to any records
 - To inspect monitoring equipment or methods
 - To sample discharge of pollutants
 - Failure to pay the annual fees



- Authorization to Construct (ATC)
 - Applications shall be filed at least 90 days in advance of the proposed start
 - There is no fee



• Residuals Management Plan

- Residuals management plans shall be submitted for all plants that generate residuals
 - An explanation of residual stabilization
 - An evaluation of storage requirements
 - A statement that application site has capacity

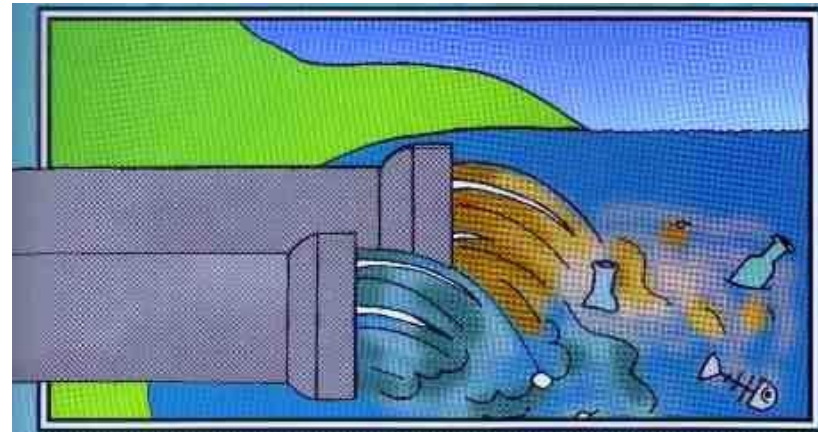


- Reliability Measures
 - for new or hydraulically expanding facilities
 - Multiple components for new or hydraulically expanding plants
 - Dual or standby power supply
 - on site or
 - have exemption from DWR Director



- Reliability Measures

- Mechanical facilities with a design flow of 5.0 MGD or higher:
 - shall have continuous operation, 24 hours, seven days per week
 - with each shift staffed by at least one certified operator
 - unless it can be demonstrated that this requirement is unwarranted

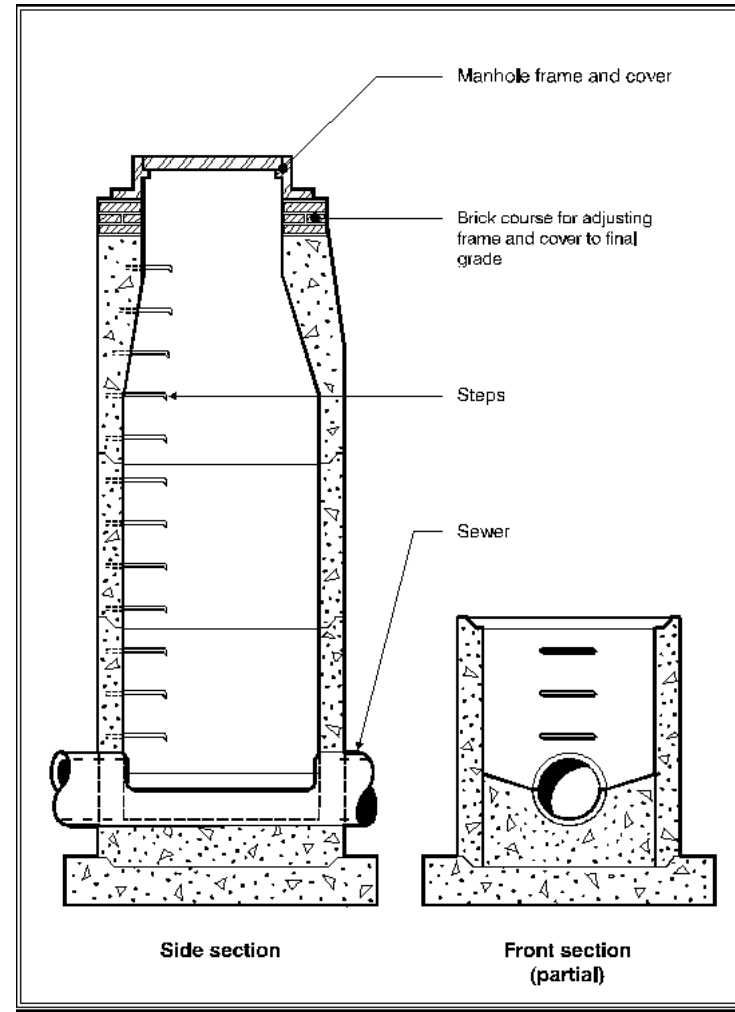


Waste Not Discharged to Surface Waters (2T .0100)

- Requirements & procedures for application & issuance of permits for the following systems, which do not discharge to surface waters



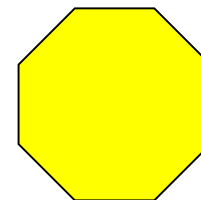
- Collection systems
- Disposal systems
- Treatment works
- Residual & Residual disposal systems
- Animal waste management systems
- Stormwater management systems
- Treatment of petroleum contaminated soils



- Minimum design requirements for:
 - sewer systems & extensions
 - pump stations
 - WWTP's
 - reclaimed water systems



- 80%-90% Rule
 - Prior to exceeding 80% of permitted hydraulic flow
 - Engineering evaluation
 - Plans & Specs
 - Eliminate extraneous flows
 - Funding source(s)
 - Prior to exceeding 90% of permitted hydraulic flow
 - Obtain permits
 - If construction is necessary,
 - final plans & specs
 - construction schedule
 - Director may allow variances if:
 - additional flow does not exceed the permitted hydraulic capacity
 - facility is compliant with all limits
 - progress is being made in developing evaluations or plans & specs
- No permits for sewer extensions issued unless permittee meets the requirements of the 80% or 90% rule





- Spills & Reporting
 - Reportable Sanitary Sewer Overflow (SSO)
 - greater than 1000 gals. to the ground or
 - ANY AMOUNT that reaches surface waters
 - Any SSO is subject to enforcement action

- **Spills & Reporting**

- Report by telephone to a person (Not Voicemail) at your regional DWR office within 24 hours after the SSO is discovered
- To report outside of business hours call 1-800-858-0368
- written report filed within 5 days



- Spills & Reporting
- In the event of a discharge of 1,000 gallons or more of wastewater to surface waters of the State, issue a press release
 - your general coverage area giving details of the discharge
 - Within 48 hours after determination was made that it reached surface waters
- Retain a copy of the release for at least 1 year



- Spills & Reporting
- In the event of a discharge of 15,000 gallons or more to surface waters:
 - Publish notice in your county & each county downstream that is significantly affected
 - Provide a copy of Notice to DWR within 30 days



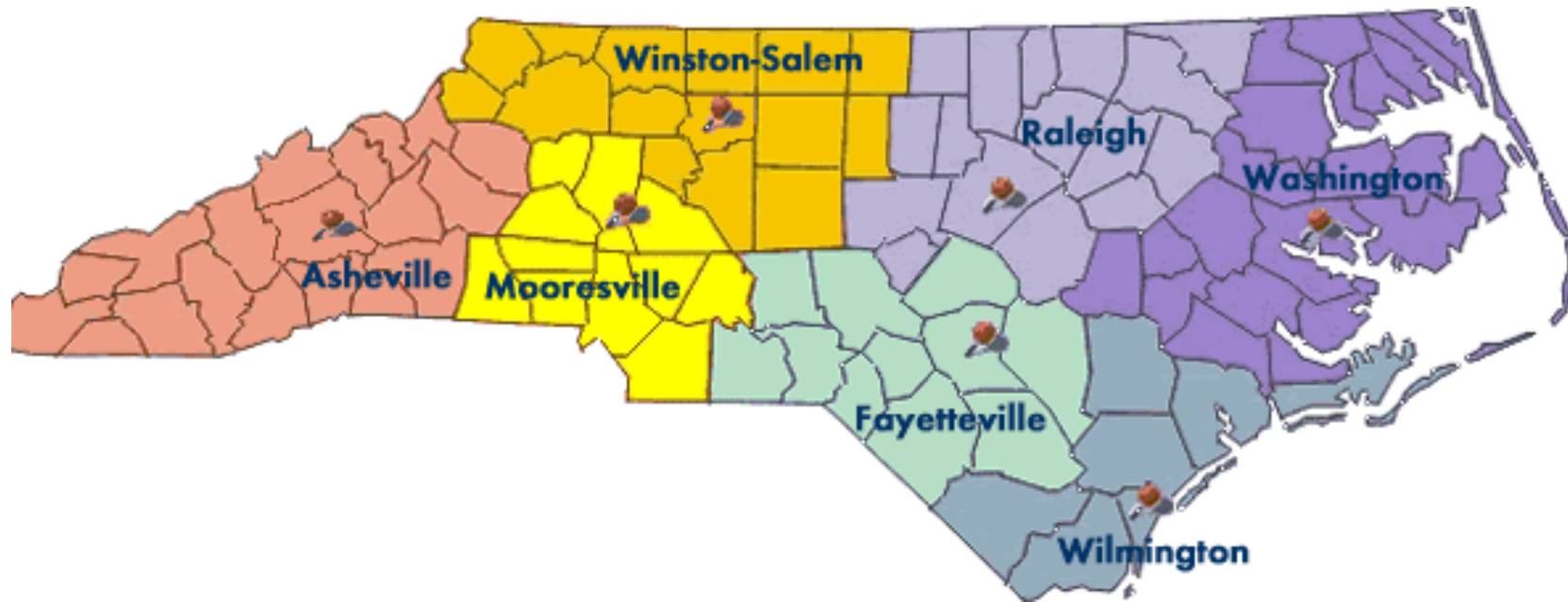
- Spills & Reporting

In the event of a discharge of 1,000,000 gallons or more to surface waters:

- Contact regional DWR office...

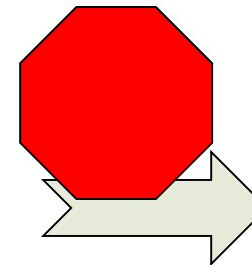


NC DEQ Regional Office Locations



Additional Information

- Placed moratorium on construction or expansion of swine farms
- Extended & expanded a program for the inspection of animal waste systems
- Required inventory of inactive lagoons
- Increased civil penalties for violations



Surface Water Monitoring: Reporting (.0500)

- Monitoring & reporting
 - Quantity of discharges
 - Quality of discharges



- All permittees required to establish, operate & maintain a monitoring program
- All facilities shall install, operate & maintain continuous flow measuring systems with recording or totalizing devices
- Device & location approved by the Director



- Devices capable of measuring flows with a maximum deviation of less than 10% from true discharge volumes
- Flow measurement devices calibrated at a minimum of once per year



- Calibration records shall be kept for at least 3 years

- Calibration records must include ...
 - Date of calibration
 - Name of person performing calibration



- Types of Samples

- Grab

- Individual sample collected instantaneously
 - *Must be representative*

- Composite

- Gathered over a 24-hr period by continuous sampling or combining grab samples
 - *Must be representative*



- Sampling
 - Influent & Effluent
 - Upstream & Downstream
 - may be discontinued at times
 - flow conditions in the receiving waters or extreme weather conditions
 - resumed at first opportunity after risk period has ceased
 - indicate conditions on DMR



- Discharge Monitoring Reports (DMR's)
 - Filed:
 - no later than 30 calendar days after the end of the reporting period
 - Forms furnished or approved by the Director
 - Submit in duplicate
 - retain for at least three (3) years

- *e-DMR program*
 - Electronic submittals now *REQUIRED...*



- Reporting
 - The following shall be retained for three years:
 - Original lab reports from any certified lab utilized for sample analysis
 - Bench notes & data logs for sample analyses performed by WWTP staff, whether or not the facility has a certified lab
 - Process control testing



- A telephone report shall be made as soon as possible, but no later than 24 hrs after the occurrence of...
 - Any failure of a collection system, pumping station or treatment facility resulting in a by-pass without treatment of all or any portion of the wastewater
 - Discharge of significant amounts of wastes which are abnormal in quantity or characteristic
 - dumping of the contents of a sludge digester
 - passage of a hazardous substance through the facility
 - other unusual circumstances
 - Process unit failure
 - due to known or unknown reasons
 - renders facility incapable of adequate treatment
 - mechanical or electrical failures of pumps, aerators, compressors, etc.

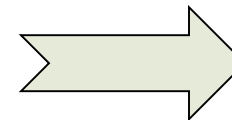


Contract Operations

- Facility operated on a contract basis:
 - ORC shall notify the owner, in writing, of existing or anticipated conditions at the facility which may interfere with proper operation & which need corrective action by the owner
 - Notice shall include recommendations for corrective action
 - Two copies of the notice shall be sent to DWR as an attachment to the next monthly DMR



- Operator's daily log
- Document visitation at proper frequency
 - Include dates & times of visits
 - Document process control monitoring
 - Maintained & submitted to the Division upon request
 - Retain for three years
 - Protects the operator



Laboratory Certification (.0800)

- Laboratory Certification rules...
 - Assure consistent data
 - Set certification requirements for labs
 - Establish fees for lab certification



- The North Carolina Laboratory Certification (NCLC) program is responsible for the compliance & enforcement of laboratory certification regulations
- Commercial, municipal or industrial wastewater labs performing analyses for NPDES reporting



- Two levels of certification
 - Certified Lab
 - performs analysis reported to NC regulatory agencies
 - wet chemistry
 - metals analysis
 - organic compounds
 - etc.
 - Field Parameter Certification
 - Conductivity
 - dissolved oxygen
 - pH
 - settleable residue
 - total residual chlorine
 - temperature



- Field parameters
 - Conductivity
 - Dissolved Oxygen
 - pH
 - Settleable Residue
 - Total Residual Chlorine
 - Temperature



- Data for field parameters must be maintained for five (5) years & must include
 - Sample location
 - Date & time of collection & analysis
 - Collector's & analyst's name
 - Meter calibration records
 - Standards & buffer information
 - Accurate data labeling



- Proficiency Testing

- Sample of unknown value is sent to each certified lab
- Lab performs the analysis & reports results
- Each certified lab must perform one passing performance evaluation sample per year for each method for which certification is obtained
- No performance evaluation (PE) samples
 - Dissolved Oxygen
 - Temperature



- Lab Decertification
 - Failure to maintain facilities, records, personnel, equipment or a quality control program
 - Submitting inaccurate data
 - Failure to discontinue supplying data to clients when a decertification is in effect
 - Failure to provide a split sample
 - Failure to use approved methods
 - Failure to report changes in laboratory supervisor or equipment changes
 - Failure to report results of the required PE by due date
 - Failure to supply analytical data requested by NCLC program
 - Failure to allow inspection



Pretreatment Programs (.0900)

- Establish responsibilities of State & local governments to control pollutants which may:
 - pass through or interfere at WWTP
 - contaminate sewage sludge
 - have an adverse impact on the WWTP, its workers or the environment



- A Publicly Owned Treatment Works (POTW) is required to have a Pretreatment Program if they accept process wastewater from a Significant Industrial User (SIU)
- May be a full or modified program depending upon flow received & SIU's



- SIU's are...

- Large manufacturing facilities
- Small industrial facilities
 - Metal finishers
 - Textile facilities
- Companies that are not typical "industries"
 - Hospitals
 - Dentist offices
 - Laboratories
 - Photo processing labs, etc.
- Any facility that the "control authority" or DWR believes has the potential to adversely impact the POTW



- Parts of a Pretreatment Program
 - Sewer Use Ordinance (SUO)
 - Industrial Waste Survey (IWS)
 - Long Term Monitoring Plan (LTMP)
 - Short Term Monitoring Plan (STMP)
 - Headworks Analysis (HWA)
 - SIU Permits (IUP)
 - Sampling & Inspection
 - Enforcement Response Plan (ERP)
 - Pretreatment Annual Report (PAR)



- DWR Inspections & Audits

- DWR Staff goes on-site annually to perform a detailed review of the pretreatment program including...
 - Files
 - Sampling & data summary sheets
 - Compliance judgment & enforcement
 - SIU correspondence
 - Inspections of SIU's



Water Pollution Control System Operators Certification Commission

- WPCSOCC or “Commission”
- Serves two functions
 - Classification of systems
 - Certification of operators



WPCSOCC Membership

- Chairman: Employee of DEQ
- Two employees of municipal WWTPs
- An employee of private industry responsible for treatment or pretreatment
- A manager of a municipality having a population of > 10,000
- A manager of a municipality having a population of < 10,000
- A faculty member of a 4 year college or university
- A superintendent or operator of a collection system
- A commercial WWTP contract operator
- Two members of agriculture in the business of producing swine, cattle or poultry



Current Members

- Corey Basinger, Chairman, DEQ Mooresville Reg Office
- Tim Bannister, Vice Chairman (TCW Inc.)
- Arnold Allred (City of Franklinville)
- Martie Groome (City of Greensboro)
- Marchell Adams-David (City of Raleigh)
- *Vacant - Municipal Manager seat*
- Matthew Haynes (Valley Proteins, Inc.)
- Troy Perkins (Greenville Utilities Commission)
- *Vacant - University seat*
- Chester Lowder (NC Farm Bureau)
- Jim Lynch (Goldsboro Milling Co)



Owners Responsibilities

- Must designate
 - in writing, an ORC & Back-up ORC
 - within 60 days prior to wastewater being introduced into a new system
 - Within 120 days of change of classification
 - Upon vacancy in ORC and/or Back-up ORC position
- Notify the regional office of DWR within 10 working days of vacancy of the ORC position



- ORC visitation requirements:
 - Grade I facility
 - Weekly
 - Grade II, Grade III & Grade IV facilities
 - 5 days/week
 - Document each visit to the facility in log
 - Date
 - Time and time on site
 - Duties/work performed
 - Issues observed

- The ORC must:
 - Properly manage, operate & maintain
 - Document daily operation in log
 - Maintenance & visitation
 - Who, what, when
 - Process control
 - Certify, by signature, all monitoring & reporting information
 - Notify owner within 24 hours of overflows, spills, bypasses, violations
 - Notify owner in writing within 5 days
 - Notify owner in writing of need for repairs, modifications
 - Be available:
 - For consultations
 - To respond to emergencies
 - To provide access to regulatory agencies



Back-Up ORC

- Permittees are required to designate one or more Back-up Operator(s) in Responsible Charge



- Back-up operator can serve as ORC
 - Must possess valid certification
 - Not to exceed 40% of required visits in a calendar year
 - Not to exceed 120 consecutive days if ORC position is vacant or in event of personal or family illness of ORC



All Certified Operators Responsibilities

- Be responsible for renewal of certification(s)
 - \$50 renewal fee
 - 6 CE hours
- Comply with statutes & rules
- Notify Commission, in writing, within 30 days of address change



Contract Operators

- Notify owner in writing within 5 calendar days
 - change of designation of ORC or Back-up ORC
 - situations which may interfere with proper operation of the system & may require corrective action by the owner
- Notice shall include comments & recommendations for required corrective action



Classification of Systems

- Biological Systems
 - Grade I – septic tanks, sand filters, lagoons, constructed wetlands
- Activated Sludge or fixed growth systems
 - Grade II- permitted flow \leq to 0.5 MGD
 - Grade III- permitted flow between 0.5 – 2.5 MGD
 - Grade IV- flow \geq 2.5 MGD
 - Grade II or III biological systems shall be increased one grade if required to achieve nutrient reduction (Total N and/or P limits)



Operator Certification

- General Eligibility
 - 18 years old
 - High school diploma or GED
 - Knowledge of wastewater characteristics & processes
 - Ability to read & understand statutes & rules
 - Ability to perform math calculations
 - Complete & maintain logs & reporting forms
 - Knowledge of the equipment employed



Biological Systems

- Grade-specific Requirements
 - Grade I
 - Completion of approved (Grade I) training school
 - Grade II
 - *Valid Grade I certificate and*
 - Completion of Grade II training school *and*
 - 6 months experience at Grade II or higher biological system
 - *“Actual experience” means the time working as a water pollution control system operator or operator in responsible charge. An operator is an individual whose job responsibility is the physical operation of process equipment and systems at a water pollution control system. Job responsibilities such as laboratory testing, facility and equipment maintenance, administrative support, or direct or indirect supervision do not qualify as actual experience*



- Requirements
 - Grade III
 - Valid Grade II Biological Certificate *and*
 - Complete Grade III training school *and*
 - 2 years actual experience Grade II or higher *or*
 - Graduate of 2 or 4 year college or university with 18 months actual experience Grade II or higher
 - Grade IV
 - Valid Grade III Certificate *and*
 - Complete Grade IV training school *and*
 - 3 years actual experience Grade III plant or higher *or*
 - Graduate of a 2 or 4 year college or university with 2 years actual experience at a Grade III or higher



Operator in Training (OIT)

- OIT meets all the prerequisite education & certification requirements but is lacking the actual experience required
- An OIT cannot be designated as an ORC or a Back-up ORC
- OIT conversion
 - Conversion Application & \$20 fee
 - Document experience
 - *“Actual experience” means the time working as a water pollution control system operator or operator in responsible charge. An operator is an individual whose principal job responsibility is the actual physical operation of process equipment and systems at a water pollution control system. Primary job responsibilities such as laboratory testing, facility and equipment maintenance, administrative support, or direct or indirect supervision do not qualify as actual experience.”*



Applying for Certification

- Submit application form
- Include the fee
- Complete the application
- Postmarked at least 30 days prior to the exam

EXAM APPLICATION

Please Read Eligibility Requirements
EXAM DATES & DEADLINES

(TAB to navigate form)

SELECT EXAM SELECT MONTH SELECT LOCATION OTHER (if Applicable)

REQUIRED WITH APPLICATION: - \$85.00 (Non-Refundable/Payable ONLY by Check or Money Order to WPCSOCC)
- Copy of Certificate of Completion for the Commission approved school attended

PERSONAL INFORMATION:
Have you previously held a certificate with the WPCSOCC that was revoked, suspended or relinquished? **SELECT:**

Certificate Number (REQUIRED): Social Security Number (Enter only if SSN certificate number): Date of Birth (MM/DD/YYYY):

Applicant First Name: Applicant Middle Name: Applicant Last Name: Suffix:

(Do you wish to see #1 or #2 on #102976)
Applicant Mailing Address:

City: State: Zip: County:

Work Phone: Home Phone: Cell Phone:

Email Address:

EDUCATION: **SELECT ONE:**

High School Name/City/State: School Phone Number: Year of Graduation or GED issuance:

College(s) attended: College City: State: Zip:

Attended from (m/yyyy): To: Years completed: 1 2 3 4

Do you receive a degree? Yes - Date Received: No Type of Degree: (S, A, AS, BA, MS) Major: Minor:

Provide a copy of official transcripts if eligibility to take the exam is based on that education.

Postmark Date: * FOR WPCSOCC STAFF USE ONLY * Check Date: Amount: \$

Reviewer's Name: Check #: School Completion Date: # of previous attempts on exam: Dates of Attempts: Approved Denied Comments: Reviewer's Initials: Date reviewed: NO RECORD

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EMPLOYER INFORMATION & RECOMMENDATION:

Employer's Name: Employer's Phone Number: Employer's Mailing Address:

City: State: Zip: County:

**** Applicants presently working at a water pollution control system must complete the following information ****

System Name: System PERMITS Number:

Type of System: **SELECT:** City: State: Zip:

Physical Address of Facility:

Immediate Supervisor's Name: Title: Phone: Ext.

Certifications held by Supervisor (WPCSOCC) Type: **SELECT** Grade: **SELECT** Certificate #:

I have reviewed this application and hereby verify that all of the information and statements provided by the applicant are true and correct to the best of my knowledge. I recommend that the Water Pollution Control System Operators Certification Commission (WPCSOCC) consider this applicant for certification. I understand that I am responsible for verifying the experience information provided on this application and that any false information provided by the applicant may lead to the revocation of any and all certificates issued to me by the WPCSOCC.

Supervisor's Signature: Date:

OPERATIONAL EXPERIENCE: List most recent experience first. Link to Continuation Form, if needed.

Date of Employment	Name/Address/Phone of Employer	Facility Type and Grade	# Hours Worked Per Week	Detailed description of HANDS-ON related OPERATIONAL experience
From: To: <input type="checkbox"/> Present				

Click Here for Continuation Page

I hereby certify that the information given in this application is correct to the best of my knowledge. I understand that providing false information on this application may lead to the revocation of any and all certificates issued to me by the Water Pollution Control System Operators Certification Commission (WPCSOCC). I have read the eligibility requirements for the type and grade certification that I am seeking and believe that I am eligible to sit for the examination for that certification.

Applicant Signature: Date:

Mail Application to:
WPCSOCC
1628 Mail Service Center, Raleigh, NC 27699-1618 Page 2 of 2 Rev. 6/2017



Applying for Certification

- Complete Application
 - All personal info
 - Experience details
 - Signatures (applicant & supervisor)
 - Certificate of Completion
 - Copies of transcripts (if requesting experience offset)
 - Check or money order
 - Proper postage & postmarked on time



Applying for Certification

- Passing score is 70%
- Applicant notified in writing of exam results
- Applicant who fails may review exam results
- Fail same exam 3 times = retake school & exam



Certificate Renewal

- A valid certificate must be renewed annually:
 - Pay renewal fee and
 - Provide proof of 6 CE hours



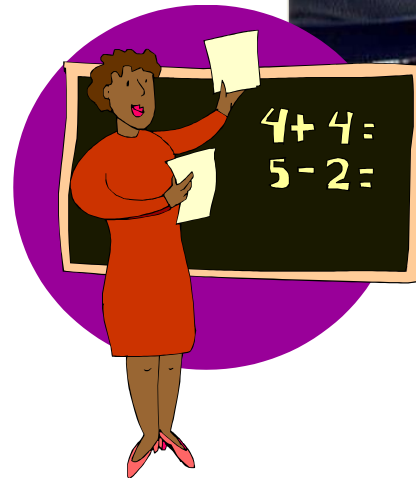
Certificate Renewal

- Certifications not renewed are considered INVALID
- To renew a certificate that has been invalid for not more than 2 consecutive years,
 - Pay renewal fees & penalties
 - Continuing education requirements must be met



Certificate Renewal

- Certificate invalid for more than 2 years
 - Take & pass exam
 - Approved training for the exam must have been taken within the past 12 months



Disciplinary Actions

- The WPCSOCC may take disciplinary actions against a certified operator for:
 - practicing fraud or deception
 - failure to use reasonable care or judgment in performance of duties
 - failure to apply knowledge or ability in performance of duties
 - incompetence or inability to properly perform duties



Disciplinary Actions

- Disciplinary action may include:
 - No action
 - Letter of reprimand
 - Suspension with conditions
 - Revocation



Revocation

- An individual that has had a certificate revoked may not petition the Commission sooner than 730 calendar days after the effective date of the revocation for any new certification



Revocation

- Certification revoked:
 - Start at the lowest level
 - Obtain passing score on exam
 - Previous operational experience not considered



Exams

2nd Thursday in...

March

June

September

December

Kenansville – Morganton – Raleigh

Salisbury – Williamston



Water Pollution Control System Operators Certification Commission

February 25, 2019

██████████
██████████
██████████

Dear Sir or Madam:

Your application has been approved for the Grade 1 COLLECTIONS Operator exam. This letter is your receipt for the \$85.00 exam fee.

The exam will be administered on TUESDAY, March 12, 2019 at 1:00:00PM at Foothills Higher Educ Ctr - Morganton. Enclosed is a map and directions.

Please bring the following items with you to the exam:

1. Photo ID for yourself
2. Copy of this acknowledgement letter
3. Electronic calculator

The following restrictions will be in place during the exam:

1. Cell phones must be turned off or set to silent mode. Cell phones may NOT be used as calculators.
2. No reference materials may be used during the exam.
3. The exam will be given over a three (3) hour period. If you arrive after the exam has begun and wish to proceed, you must complete the exam within the original 3 hour timeframe along with those who started on time.

The passing grade for the exam is set at 70%. You will be notified of the results in writing within six weeks of the exam date.

If this office may be of additional assistance to you, or if you have further questions regarding this letter or the exam, please contact our office at (919) 807-6353. Visit our website, <http://www.newwater.org/wwcert>, for examination applications, designation forms, certified operators lists, and more.

Enclosure

**ALWAYS check your notification letter
for the correct location & time of the exam...**

1618 Mail Service Center, Raleigh, North Carolina 27699-1618
Phone: (919)807-6353 / Fax: (919)715-2726
Internet: <http://www.ncwater.org/wwcert>

HISTORIC RECORD - PASS RATES - 1999 TO PRESENT



AW-A	73
AW-B	90
CS-1	81
CS-2	75
CS-3	69
CS-4	76
LAND APP	69
SURFACE IRRIG	76
SUBSURFACE	82
<u>WW-1</u>	<u>61</u>
<u>WW-2</u>	<u>48</u>
<u>WW-3</u>	<u>41</u>
<u>WW-4</u>	<u>59</u>
PC-1	63
PC-2	67

2/2020



Contact Info

- Steve Reid
- steve.reid@ncdenr.gov
- 919.707.9108
- <http://deq.nc.gov/about/divisions/water-resources/operator-certification>
 - or... ncwater.org/wwcert
 - or... search for NC certified operator...



Questions, Comments, Complaints...



Department of Environmental Quality

