

SANFORD LAW OFFICE, PLLC

Jo Anne Sanford, Attorney at Law

July 2, 2021

Via Electronic Filing

Ms. A. Shonta Dunston, Interim Chief Clerk
North Carolina Utilities Commission
4325 Mail Service Center
Raleigh, North Carolina 27699-4325

Re: Aqua North Carolina, Inc. - Application for Approval to Implement
Secondary Water Quality Improvement Project Pursuant to
G.S. 62-133.12 - Docket No. W-218, Sub 526A

Dear Ms. Dunston:

Attached for filing please find Aqua North Carolina, Inc.'s ("Aqua" or "Company") Application for Approval to Implement Secondary Water Quality Improvement Project, submitted pursuant to G.S. 62-133.12. By this Application, Aqua requests Commission approval to undertake the proposed project, which is designated to allow the Company to comply with secondary water quality standards.

Aqua submits that this water system improvement is necessary to enable the Company to provide safe, reliable, and efficient service to its customers in accordance with applicable water quality standards, and requests that the Commission, upon review of this Application, so find.

As always, thank you and your staff for your assistance; please feel free to contact me if there are any questions or suggestions.

Sincerely,

Electronically Submitted

/s/Jo Anne Sanford
Sanford Law Office, PLLC
State Bar No. 6831

Attorney for Aqua North Carolina, Inc.

c: Parties of Record

P.O. Box 28085, Raleigh, NC 27611-8085 sanford@sanfordlawoffice.com
Cell: 919.210.4900

OFFICIAL COPY

JUL 02 2021

**STATE OF NORTH CAROLINA
UTILITIES COMMISSION
RALEIGH**

DOCKET NO. W-218, SUB 526A

In the Matter of)	
Reporting Requirements from Docket)	
No. W-218, Sub 526 - Application by)	APPLICATION FOR APPROVAL
Aqua North Carolina, Inc., 202)	TO IMPLEMENT SECONDARY
MacKenan Court, Cary, North Carolina)	WATER QUALITY SYSTEM
27511, for Authority to Adjust and)	IMPROVEMENT PROJECT
Increase Rates for Water and Sewer)	PURSUANT TO G.S. 62-133.12
Utility Service in All of Its Service Areas)	
in North Carolina)	

NOW COMES Aqua North Carolina, Inc. ("Aqua" or "Company"), by and through counsel, and hereby applies to the North Carolina Utilities Commission ("Commission" or "NCUC") for approval to implement one secondary water quality system improvement project pursuant to G.S. 62-133.12 and NCUC Rule R7-39. Aqua states the following in support of this Application:

1. On June 12, 2013, North Carolina Session Law 2013-106 (House Bill 710), entitled *An Act to Permit Water Utilities to Adjust Rates for Changes in Costs Based on Third-Party Rates and to Authorize the Utilities Commission to Approve a Rate Adjustment Mechanism for Water and Sewer Utilities to Recover Costs for Water and Sewer System Improvements*, was signed into law, having previously been ratified by the North Carolina General Assembly. The General Assembly, in pertinent part, enacted G.S. 62-133.12 to authorize the Commission in a general rate case proceeding to approve a rate adjustment mechanism to allow water and sewer utilities to recover reasonable and prudently-incurred investments in eligible water and sewer system improvements.

2. G.S. 62-133.12 provides for Commission approval of a water system improvement charge ("WSIC") and a sewer system improvement charge ("SSIC"), upon finding in a general rate case that the rate adjustment mechanism is in the public interest. G.S. 62-133.12(a) provides:

"The frequency and manner of the rate adjustments under the mechanism shall be as prescribed by the Commission."

3. On June 6, 2014, the Commission entered an Order Adopting Rules to Implement G.S. 62-133.12 in Docket No. W-100, Sub 54. Rule R7-39, entitled "Water System Improvement Charge Mechanism," and Rule R10-26, entitled "Sewer System Improvement Charge Mechanism," were adopted effective as of the date of the rulemaking order.

4. G.S. 62-133.12(c)(2) and (c)(4) provide, in pertinent part, that specific approval from the Commission is necessary before Aqua may undertake and recover its incremental depreciation expense and capital costs through the WSIC mechanism for "eligible water system improvements" implemented to "comply with secondary drinking water standards."

5. By the 2014 Rate Case Order entered in Docket No. W-218, Sub 363, the Commission specifically found that it was in the public interest to approve and authorize Aqua to implement WSIC and SSIC mechanisms.

6. On October 26, 2020, the Commission entered an Order Approving Partial Settlement Agreement and Stipulation, Deciding Contested Issues, Granting Partial Rate Increase, and Requiring Customer Notice ("2020 Rate Case Order") in Docket No. W-218, Sub 526, Aqua's most recent general rate case.

7. By this Application, Aqua requests that the Commission approve the Company's proposal to implement the one secondary water quality system improvement filtration project, the history of which is described in Appendix A.¹ Approval is requested pursuant to G.S. 62-133.12 and NCUC Rule R7-39.

8. The proposed WSIC project described in Appendix A is necessary in order to allow Aqua to comply with secondary water quality standards in conformity with G.S. 62-133.12. Appendix A contains a description of this proposed project and provides documentation in support thereof.

9. If the Commission approves Aqua's proposal to undertake and implement the one secondary water quality project described in Appendix A, the Company will, by December 2021, make a collective, total capital investment in the Carden's Creek water system (located in Durham County) ranging from approximately \$470,000 to \$495,000 in a good faith effort to remedy secondary water quality issues.

10. In addressing secondary water quality issues, Aqua generally follows a four-step protocol, moving from least-cost options to more expensive options at each stage. As a first step, the Company cleans the hydro tank and flushes the system. If a second treatment option is necessary, the Company evaluates the use of a sequestering agent, such as polyphosphate, and initiates this form of treatment, if effective. If a third stage is necessary, Aqua

¹ Aqua submitted the Executive Summary for the Carden's Creek Well #1 and Well #2 project to the Public Staff for its review and concurrence in March 2021. The Public Staff subsequently conducted discovery and follow-up discussions between Aqua and the Staff were undertaken. Aqua received email notification from the Public Staff on May 27, 2021, that the Staff would recommend approval, before the Commission, of WSIC treatment for the cost to install greensand type (i.e., manganese oxide) filtration at Carden's Creek Well #1 and Well #2.

continues to use a sequestering agent where applicable, and, in addition, installs disposable cartridge filtration on the well. If further action is required, the Company installs an iron and manganese filtration type well filter, which is considered to be the best available technology to solve secondary water quality issues but is by far the most expensive treatment option.

11. Aqua identifies and has discussed with the Public Staff the need to accelerate the secondary water quality treatment protocols, including the installation of iron and manganese type filtration in some instances. Although other options are appreciably less expensive, they may not effectively treat the iron or manganese and, in Aqua's experience, may result in operational issues such as premature failure of cartridge filters. Every situation is being addressed individually, which leads to different approaches to prudently solving the issue for Aqua's customers.

12. The attorney for Aqua, on whom all pleadings and notices should be served, is:

Jo Anne Sanford
Sanford Law Office, PLLC
Post Office Box 28085
Raleigh, North Carolina 27611-8085
Telephone: 919.210.4900
sanford@sanfordlawoffice.com

WHEREUPON, Aqua hereby requests that, for purposes of and consistent with G.S. 62-133.12, the Commission (a) find and conclude that the one proposed WSIC project set forth and described in Appendix A to this Application is needed in order for the Company to comply with secondary water quality standards in the specific service area covered by this project and (b) specifically approve

implementation of this proposed secondary water quality improvement project as an eligible water system improvement project.

Respectfully submitted this 2nd day of July 2021.

SANFORD LAW OFFICE, PLLC

Electronically Submitted

/s/Jo Anne Sanford

North Carolina State Bar No. 6831

P.O. Box 28085

Raleigh, North Carolina 27611-8085

Telephone: 919-210-4900

E-mail: sanford@sanfordlawoffice.com

/s/Robert H. Bennink, Jr.

Bennink Law Office

North Carolina State Bar No. 6502

130 Murphy Drive

Cary, North Carolina 27513

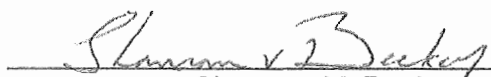
Telephone: 919-760-3185

Email: BenninkLawOffice@aol.com

Attorneys for Aqua North Carolina, Inc.

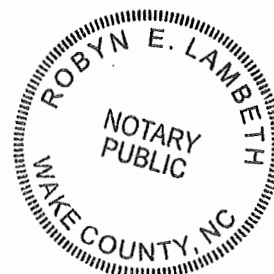
VERIFICATION

Shannon V. Becker, being duly sworn, deposes and says: that he is President of Aqua North Carolina, Inc.; that he is familiar with the facts set out in this **Application for Approval to Implement Secondary Water Quality System Improvement Project Pursuant to G.S. 62-133.12** filed in Docket No. W-218, Sub 526A; that he has read the foregoing Application and knows the contents thereof; and that the same is true of his knowledge except as to those matters stated therein on information and belief, and as to those he believes them to be true.


Shannon V. Becker

Sworn to and subscribed before me this
the 2nd day of July 2021.


Notary Public



My Commission Expires: May 13, 2026

I signed this notarial certificate on July 2, 2021, according to the emergency video notarization requirements contained in G.S. 10B-25.

Notary Public location during video notarization: Wake County
Stated physical location of principal during video notarization: Wake County

AQUA NORTH CAROLINA – SECONDARY DRINKING WATER QUALITY

RATE DIVISION

Aqua North Carolina, Inc. – Water

SUBDIVISION/PWS ID#

Carden's Creek Well #1 and Well #2 Durham County, PWS ID #NC 03-32-126

TOTAL PERMITTED CONNECTIONS IN CARDEN'S CREEK MASTER SYSTEM	EXISTING CUSTOMERS IN MOST IMMEDIATE SUBDIVISION
72	72

DESCRIPTION OF CURRENT WATER QUALITY ISSUES

Numerous customers have expressed concerns regarding the water quality in the Carden's Creek master system. The samples taken from Carden's Creek Well #1 on August 20, 2020, show results of 0.342 mg/L for total iron and 0.219 mg/L for total manganese. The samples taken from Well #2 on February 20, 2021, shows results of 0.267 mg/L for total iron and 0.401 mg/L for total manganese. These results indicate that the total iron for the August 20, 2020 result and results for total manganese levels are above the secondary Maximum Contaminant Levels (sMCLs) of 0.30 mg/L for iron and 0.05 mg/L for manganese. In addition, the manganese levels exceed the EPA Health Advisory Limit of 0.3 mg/L which is being actively enforced by NCDEQ. Carden's Creek Well #1 is approved for a total of 33 gallons of water per minute. Carden's Creek Well #2 is approved for a total of 23 gallons of water per minute; however, Well #2 currently runs in operational lag mode and is only used in periods of peak demand.

ALTERNATIVE STEPS PREVIOUSLY TAKEN TO POSSIBLY REMEDY THE PROBLEM

Aqua began feeding SeaQuest at Well #1 in October 2015. Well #1 has a Harmsco particulate filter which was installed in May 2018 and a Harmsco particulate filter was installed at Well #2 in May 2018. The distribution system has been flushed annually since 2017 and is scheduled to be flushed again in December 2021. Installation of the iron and manganese filtration system is proposed in order to provide sufficient water quality.

RECOMMENDATION OF THE PUBLIC STAFF

The Public Staff supports implementation of Aqua's proposal to install a filter system.

AQUA'S PROPOSAL TO CORRECT THE PROBLEM(S)

Aqua is proposing to interconnect the two wells and install a manganese dioxide filter to treat the combined flow from both wells. Manganese dioxide filtration is considered the best practicable technology to provide water that is reliably and consistently under the secondary water quality standards for iron and manganese.

ESTIMATED CAPITAL COST TO BE RECOVERED	ESTIMATE OF THE ANNUAL DEPRECIATION EXPENSE
\$470,000 - \$495,000	\$16,483.50

ESTIMATED DATE OF PROJECT COMPLETION: DECEMBER 2021

CERTIFICATE OF SERVICE

I hereby certify that I have served a copy of the attached **APPLICATION FOR APPROVAL TO IMPLEMENT SECONDARY WATER QUALITY SYSTEM IMPROVEMENT PROJECT PURSUANT TO G.S. 62-133.12**, filed by Aqua North Carolina, Inc. in Docket No. W-218, Sub 526A, on the parties of record, in accordance with North Carolina Utilities Commission Rule R1-39, either by: United States mail, first class postage pre-paid; by hand delivery; or by means of electronic delivery upon agreement of the receiving party.

This the 2nd day of July 2021.

Electronically Submitted
/s/Jo Anne Sanford
State Bar No. 6831

SANFORD LAW OFFICE, PLLC
sanford@sanfordlawoffice.com
Tel: 919.210.4900

**ATTORNEY FOR AQUA NORTH
CAROLINA, INC.**