SANFORD LAW OFFICE, PLLC

Jo Anne Sanford, Attorney at Law

May 5, 2022

Via Electronic Filing

Ms. A. Shonta Dunston 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 one proposed project, which is designed 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

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
Aqua North Carolina, Inc., 202
MacKenan Court, Cary, North Carolina
27511, for Authority to Adjust and
Increase Rates for Water and Sewer
Utility Service in All of Its Service Areas
in North Carolina

APPLICATION FOR APPROVAL TO IMPLEMENT SECONDARY WATER QUALITY SYSTEM IMPROVEMENT PROJECT PURSUANT TO G.S. 62-133.12

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.¹

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)(4), as recently amended by Session Law 2021-149, provides, 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 or other health or environmental standards established by federal, State, or local governments."

¹ G.S. 62-133.12 was recently amended by the North Carolina General Assembly by Section 2 of Session Law 2021-149 (Senate Bill 211) effective September 10, 2021.

- 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 one secondary water quality system improvement filtration project, the history of which is described in Appendix A.² 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 improvement project described in Appendix A, the Company will, by December 2022, make a total capital investment in the Greymoss/Fitzford Estates water system (located in Durham County)

² Aqua submitted the Executive Summary for the Greymoss/Fitzford Estates Well No. 3 project to the Public Staff for its review and concurrence on December 14, 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 March 25, 2022, 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 Greymoss/Fitzford Estates Well No. 3.

ranging from approximately \$320,000 to \$345,000 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 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 5th day of May 2022.

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.

AQUA NORTH CAROLINA – SECONDARY DRINKING WATER QUALITY

RATE DIVISION

Aqua North Carolina, Inc. – Water

SUBDIVISION/PWS ID#

Greymoss/Fitzford Estates Well #3

Durham County, PWS ID #NC 03-32-111

TOTAL PERMITTED CONNECTIONS IN GREYMOSS/FITZFORD ESTATES MASTER SYSTEM

299

EXISTING CUSTOMERS IN MOST IMMEDIATE SUBDIVISION (GREYMOSS/FITZFORD ESTATES)

231

DESCRIPTION OF CURRENT WATER QUALITY ISSUES

Numerous customers have expressed concerns regarding the water quality in the Greymoss/Fitzford Estates Master System. The samples taken from Greymoss/Fitzford Estates Well #3 on December 6, 2021, show results of 0.532 mg/L for total iron and 0.704 mg/L for total manganese. These results indicate that the total iron is above the secondary Maximum Contaminant Level (sMCL) of 0.30 mg/L and that the total manganese level is above the sMCL of 0.05 mg/L. The production for Greymoss/Fitzford Estates Well #3 is 26 gallons of water per minute.

ALTERNATIVE STEPS PREVIOUSLY TAKEN TO POSSIBLY REMEDY THE PROBLEM

Aqua is currently feeding a sequestrant at Well #3 and there is a Harmsco cartridge filter that was installed in 2017. Sequestrants have the capability to strip protective coatings from internal premise plumbing. Greymoss/Fitzford Estates has recently had a copper Action Level Exceedance (ALE), and the sequestrant has been discontinued at this well. The distribution system was flushed in April and November 2020 and most recently in January 2022. The system will be flushed on an ongoing annual basis. Installation of the iron and manganese filtration system is proposed 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 install a manganese dioxide filter at Greymoss/Fitzford Estates Well #3. 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. Filtration is required to be installed to meet the conditions of 15 A NCAC 18C.1811 and 15 A NCAC 18C.1812 since the sequestrant has been discontinued to meet conditions specified in the EPA Safe Drinking Water Act Lead and Copper Rule.

ESTIMATED CAPITAL COST TO BE RECOVERED	ESTIMATE OF THE ANNUAL DEPRECIATION EXPENSE
\$320,000 - \$345,000	\$11,488.50

ESTIMATED DATE OF PROJECT COMPLETION: DECEMBER 2022

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.

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Sworn to and subscribed before me this the day of May 2022. Notary Public

My Commission Expires:

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 5th day of May 2022.

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.