SANFORD LAW OFFICE, PLLC

Jo Anne Sanford, Attorney at Law

March 1, 2022

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

Re: Aqua North Carolina, Inc.

Docket No. W-218, Sub 526A

Sixteenth Semi-Annual Report Regarding Secondary Water

Quality Concerns

Dear Ms. Dunston:

Enclosed please find for filing the referenced Sixteenth Semi-Annual Report Regarding Secondary Water Quality Concerns, jointly submitted by Aqua North Carolina, Inc. and the Public Staff. This Report is the latest in a series of reports filed pursuant to the Commission's Rate Case Order of October 26, 2020, in Docket No. W-218, Sub 526, at page 171 (Ordering Paragraph No. 19).

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

Sincerely,

Electronically Submitted /s/Jo Anne Sanford State Bar # 6831

Attorney for Aqua North Carolina, Inc.

c: Parties of Record

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

STATE OF NORTH CAROLINA **UTILITIES COMMISSION** RALEIGH

DOCKET NO. W-218, SUB 526A

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of

Reporting Requirements from Docket No. W-218,) **SIXTEENTH** Sub 526 - Application by Aqua North Carolina, Inc.,) SEMI-ANNUAL REPORT 202 MacKenan Court, Cary, North Carolina 27511,) **REGARDING** for Authority to Adjust and Increase Rates for) SECONDARY WATER Water and Sewer Utility Service in All of Its Service) QUALITY CONCERNS Areas in North Carolina

NOW COME Aqua North Carolina, Inc. ("Aqua" or "Company") and the Public Staff – North Carolina Utilities Commission ("Public Staff"), by and through the undersigned counsel, to file this Sixteenth Semi-Annual Report Regarding Secondary Water Quality Concerns ("Sixteenth Semi-Annual Report"), as discussed below.

In support of this Sixteenth Semi-Annual Report, Aqua and the Public Staff state the following:

On October 26, 2020, the North Carolina Utilities Commission ("NCUC" or "Commission") issued its 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.

The Commission included the following reporting requirement in its Ordering Paragraph No. 19, at page 171 of the 2020 Rate Case Order:

That the Public Staff and Aqua NC are required to file a written report with the Commission, on March 1 and September 1 each year

in which the WSIC is in effect, on secondary quality concerns that are affecting its customers. If a particular secondary water quality concern has affected or is affecting 10% of the customers in an individual subdivision service area or 25 billing customers in an individual service area, whichever is less, the customers affected and the estimated expenditures that are necessary to eradicate to the extent practicable water quality issues related to iron and manganese through the use of projects that are eligible for recovery through the WSIC shall be detailed in the written report. The written report shall also contain a recommendation as to whether the Commission should order Aqua NC to pursue such corrective action and an underlying reason why the action should or should not be undertaken. If there are no secondary water issues or if the secondary water quality issues are below the 10%/25 threshold previously set forth, Aqua NC and the Public Staff shall so inform the Commission, but they need not report secondary water quality issues resolved by Aqua NC without the assistance or expectation of assistance of the WSIC.

On August 15, 2014, Aqua filed its First Semi-Annual Report on Secondary Water Quality Concerns in Docket No. W-218, Sub 363A. Thereafter, Aqua filed an additional 14 Semi-Annual Reports, including its Fifteenth Semi-Annual Report Regarding Secondary Water Quality Concerns which was filed in Docket No. W-218, Sub 526A on September 1, 2021.

DISCUSSION

Aqua determined that there were three subdivisions or service areas served by the Company where a particular secondary water quality concern affected either 10 percent of the customers or 25 billing customers during the six-month reporting period ending December 31, 2021, which is the period addressed by this Sixteenth Semi-Annual Report. The Aqua systems in question are listed below.

Systems Located in	Systems Located in	Systems Located in
Aqua's Central Area	Aqua's Western Area	Aqua's Coastal Area
Hunt Farms	Castlewood Sunset Hills	None

SPECIFIC SERVICE AREA REPORTS

<u>Castlewood</u>. The Castlewood water system currently serves 15 connections and could serve 47 at full build-out; however, no additional connections will likely be made as this system is currently paralleled by the City of Gastonia. The system has one approved well and one 5,000-gallon hydro-pneumatic storage tank. Aqua adds sodium hypochlorite and a polyphosphate blend.

Aqua received five water quality complaints from three customers during the six-month reporting period ending December 31, 2021. One complaint was received during the previous (fifteenth) reporting period ending June 30, 2021¹; Castlewood was also previously included in the seventh and ninth semi-annual reports.

Castlewood's last Inorganic Chemical sample (IOC), which was taken on May 19, 2021, showed the levels for iron at 0.524 mg/L and manganese at 0.179 mg/L, which were both above the secondary Maximum Contaminant Levels (sMCLs).

The Castlewood system was flushed on February 7, 2022, February 4, 2021 and July 22, 2021. In 2020, scheduled flushing activities were suspended for most of the year due to the ongoing situation with the COVID-19 Pandemic in North Carolina in order to minimize any inconvenience to customers. The system was also flushed in December 2020. In 2019, Castlewood was flushed in July, August, and October.

The Castlewood system is included in Aqua's secondary water quality plan for a future evaluation of WSIC eligible improvements to prudently address customer

¹ See Fourteenth Semi-Annual Report, filed on March 1, 2021, in this docket.

water quality concerns. While a formal engineering estimate has not been performed, the estimated expenditures necessary to eradicate secondary water quality issues related to iron and manganese with projects that are eligible for recovery through the WSIC mechanism could include the installation of iron and manganese filtration at an approximate cost of \$150,000 - \$250,000. Alternatively, another option may be to connect all remaining customers to the City of Gastonia's water system and abandon the remaining assets, which would avoid the incremental cost of new filtration. The specific connection costs to the City's water system along with the cost of abandoned assets would have to be determined. In the meantime, Aqua will continue to monitor the polyphosphate blend feed rate to minimize the secondary water quality impacts to water quality at Castlewood.

Public Staff Comments. As mentioned above, Castlewood previously appeared in the Seventh, Ninth, and Fourteenth Semi-Annual Reports. In the Fourteenth Semi-Annual Report, the Public Staff recommended Aqua evaluate the feasibility of purchasing water from the City of Gastonia or transferring the system to the City, including quantification of the Company's current net plant investment in the system. The Company has not provided all the information pertaining to possible interconnection or transfer to the City of Gastonia, including any conversations with the City, that the Public Staff needs to properly evaluate and make its recommendation regarding Aqua's plan of action and any potential future WSIC eligible improvements to the Castlewood system.

Aqua's Response to the Public Staff Comments. The Castlewood system is currently a Group 2 system in the Company's prioritized secondary water quality plan based on its existing heightened levels of iron and manganese and Aqua would like to proceed with addressing the water quality issues in this system as quickly as possible.

However, based on Public Staff's position regarding a similar paralleled water system - Cabarrus Acres, there is a clear disagreement as to the recovery of costs to provide safe and reliable service to the Cabarrus Acres customers.

The Company expects the Public Staff to have a similar position relative to the Castlewood system. The Company spent significant time investigating four alternatives and proposed multiple solutions for improvement and recovery of applicable costs for the Cabarrus Acres system. Therefore, Aqua is not willing to expend the resources or time exploring options for the Castlewood water system when it is highly likely the same exercise will again take place and the Public Staff will simply recommend a sale option under the associated conditions suggested by the Staff for Cabarrus Acres. Aqua will be filing a request with the Commission to address the clear disagreement as to how the Company can provide safe and reliable water to its Cabarrus customers.

Hunt Farms. The Hunt Farms water system currently serves 35 connections and is at full build-out. The system has one approved well and one 2,000-gallon hydro-pneumatic storage tank. Aqua adds sodium hypochlorite, a polyphosphate blend, and sodium hydroxide. A Harmsco filter was installed at the well in April 2020.

Aqua received four water quality complaints during the six-month reporting period ending December 31, 2021. Two complaints were received during the previous reporting period ending June 30, 2021. This is the first time that the Company has been required to include the Hunt Farms water system in a Semi-Annual Report.

Hunt Farms' last IOC sample, which was collected on April 2, 2021, showed levels for iron of 0.549 mg/L and manganese of 0.211 mg/L, which were both above the sMCLs.

The Hunt Farms system was flushed in January 2022, June 2021, August 2020, and May 2019.

Aqua has prioritized this site in its secondary water quality plan for future treatment and is currently compiling the necessary documentation and sample data for preparation of an Executive Summary. Aqua will continue to monitor the polyphosphate blend feed rate and flushing to minimize the secondary water quality issues at Hunt Farms in the interim.

<u>Public Staff Comments</u>. Upon receipt, the Public Staff will review the executive summary in a timely manner and provide appropriate feedback to Aqua.

<u>Sunset Hills</u>. The Sunset Hills water system currently serves eight connections; no additional connections will likely be made as this system is currently paralleled by the City of Hickory. The system has one approved well. Aqua adds sodium hypochlorite and sodium hydroxide.

Aqua received one water quality complaint in the six-month reporting period ending December 31, 2021. The recent complaint was related to discolored water.

There were no customer complaints received during the previous reporting period ending June 30, 2021. This is the first time that the Company has been required to include the Sunset Hills water system in a Semi-Annual Report.

Sunset Hills is not an active Public Water Supply system due to the limited number of connections and the Company is not required to perform compliance IOC monitoring. Aqua performs acute – nitrate, bacteriological, and arsenic – monitoring only.

Aqua will be performing additional secondary water quality testing to prioritize the planning and assess the viability of future capital and/or operational improvements necessary to prudently address customer water quality concerns. While a formal engineering estimate has not been performed, the estimated expenditures necessary to eradicate secondary water quality issues related to iron and manganese with projects that are eligible for recovery through the WSIC mechanism could include the installation of iron and manganese filtration at an approximate cost of \$150,000 - \$250,000. Alternatively, another option may be to connect all remaining customers to the City of Hickory's water system and abandon the remaining assets, which would avoid the incremental cost of new filtration. The specific connection costs to the City's water system along with the cost of abandoned assets would have to be determined.

<u>Public Staff Comments</u>. For the immediate future, the Public Staff is in agreement with Aqua's plan of action to address discolored water complaints at Sunset Hills. The Public Staff recommends that Aqua evaluate the feasibility of

purchasing water from the City of Hickory or transferring the system to the City, including quantification of the Company's current net plant investment in the system.

The following Aqua appendices are attached to this Report:

<u>Appendix</u>	System Name
Appendix A	Castlewood
Appendix B	Hunt Farms
Appendix C	Sunset Hills

The Aqua appendices show:

- a. Simple map of system showing the location of each well, with wells identified; **FILED CONFIDENTIALLY**;
- b. Department of Environmental Health/Public Water Supply Section ("DEH/PWSS") approval letter for each well;
- c. Original inorganic analysis for each well submitted to DEH for well approval;
- d. All inorganic analyses from each well at the wellhead for the last six years;
- e. Copies of all iron and/or manganese analyses for soluble and insoluble the past three years baseline (without treatment), well head (after treatment), and distribution system (after treatment);
- f. Copies of the Pump Status Reports for each well for the last two years;
- g. Original 24-hour pump test for each well; and
- h. Copies within the last six months of all Aqua NC emails to and from PWSS, letters to and from PWSS, reports to and from PWSS, and the recommendations of PWSS regarding water quality concerns on Aqua NC's water systems.

RECOMMENDATION

WHEREFORE, Aqua and the Public Staff request that the Commission review this Sixteenth Semi-Annual Report Regarding Secondary Water Quality

Concerns and accept the corrective actions recommended herein as reasonable and appropriate to address the secondary water quality issues affecting the Company's service areas listed above.

Respectfully submitted, this the 1st day of March, 2022.

ATTORNEYS FOR AQUA NORTH CAROLINA, INC. Electronically Submitted

/s/Jo Anne Sanford

Sanford Law Office, PLLC Post Office Box 28085 Raleigh, North Carolina 27611-8085 T: 919.210.4900 sanford@sanfordlawoffice.com State Bar No. 6831

/s/Robert H. Bennink, Jr.

Bennink Law Office 130 Murphy Drive Cary, North Carolina 27513 T: 919.760.3185 BenninkLawOffice@aol.com State Bar No. 6502

ATTORNEY FOR THE PUBLIC STAFF

/s/Megan Jost

Staff Attorney Public Staff Legal Division 4326 Mail Service Center Raleigh, NC 27699-4326 megan.jost@psncuc.nc.gov

VERIFICATION

Shannon V. Becker, being duly sworn, deposes and says: that he is the President of Aqua North Carolina, Inc.; that he is familiar with the facts set out in this SIXTEENTH SEMI-ANNUAL REPORT REGARDING SECONDARY WATER QUALITY CONCERNS filed in Docket No. W-218, Sub 526A; that he has read the foregoing Sixteenth Semi-Annual Report 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 day of 2022.

Robyn E. Lambeth Notary Public

My Commission Expires: When 13 2020

NOTARY THE WASHINGTON OF THE W

CERTIFICATE OF SERVICE

I hereby certify that on this the 1st day of March 2022, a copy of the foregoing

SIXTEENTH SEMI-ANNUAL REPORT REGARDING SECONDARY WATER

QUALITY CONCERNS has been duly served upon all parties of record in Docket

No. W-218, Sub 526A by electronic service, addressed as shown below:

Megan Jost
William Grantmyre
Staff Attorneys
Public Staff Legal Division
4326 Mail Service Center
Raleigh, NC 27699-4326
megan.jost@psncuc.nc.gov
william.grantmyre@psncuc.nc.gov

Margaret A. Force
Assistant Attorney General
Teresa L. Townsend
Special Deputy Attorney General
North Carolina Department of Justice
P.O. Box 629
Raleigh, NC 27602
pforce@ncdoj.gov
ttownsend@ncdoj.gov

In the second of the second of