

**STATE OF NORTH CAROLINA  
UTILITIES COMMISSION  
RALEIGH**

DOCKET NO. W-218, SUB 526A

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of		
Applications by Aqua North Carolina, Inc.,	)	
202 MacKenan Court, Cary, North Carolina	)	ORDER APPROVING
27511, for Approval to Implement Secondary	)	SECONDARY WATER QUALITY
Water Quality System Improvement Project	)	IMPROVEMENT PROJECT
Pursuant to N.C. Gen. Stat. § 62-133.12	)	

BY THE COMMISSION: North Carolina General Statute § 62-133.12 authorizes the Commission in a general rate case proceeding to approve a rate adjustment mechanism to allow water and sewer utilities to recover the incremental depreciation expense and capital costs associated with reasonable and prudently incurred investments in eligible water and sewer system improvements. By Order issued May 2, 2014, in Docket No. W-218, Sub 363, the Commission approved Aqua North Carolina, Inc.’s (Aqua) request to utilize a Water System Improvement Charge/Sewer System Improvement Charge (WSIC/SSIC) mechanism pursuant to N.C. Gen. Stat. § 62-133.12, finding that the mechanism is in the public interest.

Commission Rules R7-39(f) and R10-26(f) provide that once WSIC/SSIC mechanisms are approved and eligible water and sewer system improvements are in service, the utility (in this case, Aqua) may file a request with the Commission for authority to impose water and sewer system improvement charges pursuant to the mechanisms.

North Carolina General Statute § 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.

On November 9, 2021, Aqua filed an application for approval to implement a secondary water quality system improvement project pursuant to N.C.G.S. § 62-133.12 and Commission Rule R7-39 (Application). The project and the estimated cost are summarized below.

<u>System</u>	<u>County</u>	<u>Average Pumping Capacity Gallons Per Minute</u>	<u>Aqua Estimated Cost (in Thousands)</u>
Foxboro Estates Well 3	Orange	23	\$190-\$215

The Public Staff presented this matter to the Commission at its Staff Conference on April 18, 2022, and stated that it had reviewed the filter project proposed by Aqua.<sup>1</sup> Based upon its review of documents and other information provided by Aqua and discussions with Aqua's engineers and operations managers, the Public Staff stated that the proposed filter is necessary for Aqua to provide adequate secondary standard water quality and, as such, the Public Staff recommends that the Commission approve Aqua's proposed secondary water quality project.

In recommending approval of the project, the Public Staff has advised that decisions to install filters, such as manganese dioxide filters, should be made judiciously because installing these filters is many times more costly than sequestration coupled with adequate flushing. The Public Staff has stated that the sequestration treatment of iron and manganese with polyphosphates and orthophosphates on water from North Carolina water wells, coupled with comprehensive water main flushing programs, has provided adequate secondary standard water quality on many water systems at a very reasonable cost. The Public Staff has further stated that testing to determine whether the iron and manganese are soluble (clear liquid) or insoluble (solid particles and visible) in raw untreated water at the well head, after treatment with polyphosphate/orthophosphate or SeaQuest® at the entry point, and in the distribution system, has been widely used in North Carolina for many years and provides extremely valuable information to assist in evaluations of whether filtration is necessary. The Public Staff has noted that these measures are exponentially less expensive than the installation of an iron and manganese filtration system.

The Public Staff has recognized, however, that for secondary water quality issues of considerable magnitude and consistency, sequestration treatment and flushing may not be effective, and filtration may be necessary. As discussed in previously filed Secondary Water Quality Report and Recommendations reports, the Public Staff strongly supports the implementation of two secondary water quality processes: a comprehensive customer education program and a comprehensive water main flushing program.

The Public Staff stated that it will continue to carefully and thoroughly review secondary water quality information and documentation presented by Aqua (including participating in meetings with Aqua engineers and operations managers), conduct selected site visits, discuss secondary water quality issues with customers, and, when appropriate, recommend Commission approval of equipment and infrastructure installations.

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<sup>1</sup> The Public Staff has previously filed a Secondary Water Quality Report and Recommendations regarding Aqua's applications for approval to implement secondary water quality system improvement projects. The Public Staff states that it maintains its positions set forth in those reports regarding the appropriate use of filtration. However, because these reports typically provide the same information as previously filed versions, the Public Staff plans to discontinue the filing of these reports prior to presenting its recommendations at Staff Conference unless Aqua's applications are materially different or otherwise necessitate a more detailed discussion by the Public Staff.

Based upon the foregoing, Aqua's Application, and the entire record in this matter, the Commission finds and concludes that Aqua should proceed to implement secondary standard water quality improvement through the installation of Aqua's proposed filtration project.

IT IS, THEREFORE, ORDERED that Aqua North Carolina, Inc., is authorized to implement the filtration project proposed in its November 9, 2021 Application to comply with secondary water quality standards.

ISSUED BY ORDER OF THE COMMISSION.

This the 19th day of April, 2022.

NORTH CAROLINA UTILITIES COMMISSION

A handwritten signature in cursive script that reads "Erica N. Green".

Erica N. Green, Deputy Clerk