

**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)	ORDER APPROVING
Carolina 27511, for Approval to Implement)	SECONDARY WATER QUALITY
Secondary Water Quality System)	IMPROVEMENT PROJECTS
Improvement Projects Pursuant to N.C.)	
Gen. Stat. § 62-133.12)	

BY THE COMMISSION: N.C. Gen. Stat. § 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.G.S. § 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.

N.C.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.

On April 14, May 17, July 2, August 5, and August 20, 2021, Aqua filed applications for approval to implement secondary water quality system improvement projects pursuant to N.C.G.S. § 62-133.12 and Commission Rule R7-39 (Applications). The six projects and the estimated costs are summarized below.

<u>System</u>	<u>County</u>	<u>Approved Pumping Capacity Gallons Per Minute</u>	<u>Aqua Estimated Cost (in Thousands)</u>
Spring Shores Well 2	Iredell	50	\$272-\$297
Martindale Well 3	Wake	60	\$325-\$350
Carden's Creek Wells 1 and 2	Durham	56	\$470-\$495
Bayleaf Farms Well 1	Wake	117	\$330-\$355
Royal Senter Ridge Well 1	Wake	68	\$390-\$415 ¹
Royal Senter Ridge Wells 2 and 3	Wake	128	\$370-\$395
Total			\$2,157-\$2,307

On August 30, 2021, the Public Staff – North Carolina Utilities Commission (Public Staff) filed its Secondary Water Quality Report and Recommendations regarding Aqua's Applications. The Public Staff stated that it had reviewed the filter projects proposed by Aqua. Based upon its review of documents and other information provided by Aqua, site visits, and discussions with customers and Aqua's engineers and operations managers, the Public Staff recommended that the Commission approve the implementation of the proposed secondary water quality projects.

In recommending approval of the projects, the Public Staff 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. According to the Public Staff, the annual revenue requirement increase for the minimum estimated capital expenditure of \$2,157,000 for these six filtration systems is approximately \$263,986 compared to the annual revenue requirement for the chemical cost for sequestration of approximately \$1,768. The Public Staff 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. 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. These measures are exponentially less expensive than the installation of an iron and manganese filtration system. The Public Staff 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 previous reports, the Public Staff strongly

¹ In a discovery response provided to the Public Staff on March 23, 2021, the Company estimated that the interconnection of the Branston and Royal Senter Ridge distribution systems and separate filtration at Royal Senter Ridge Well 1 and Royal Senter Ridge Wells 2 and 3 would cost \$680,000.

supports the implementation of two secondary water quality processes: a comprehensive customer education program and a comprehensive water main flushing program.

In summary, 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.

The Public Staff presented this matter to the Commission at its Staff Conference on September 7, 2021. The Public Staff stated that the proposed filters are 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 projects.

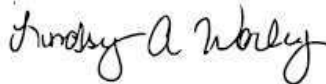
Based upon the foregoing, Aqua's Applications, the Public Staff's Secondary Water Quality Report and Recommendations regarding Aqua's Applications, and the entire record in this matter, the Commission finds and concludes that Aqua should proceed to implement secondary standard water quality improvements through the installation of Aqua's proposed filtration projects.

IT IS, THEREFORE, ORDERED that Aqua North Carolina, Inc., is authorized to implement the six filtration projects proposed in its April 14, May 17, July 2, August 5, and August 20, 2021 Applications to comply with secondary water quality standards.

ISSUED BY ORDER OF THE COMMISSION.

This the 7th day of September, 2021.

NORTH CAROLINA UTILITIES COMMISSION



Lindsey A. Worley, Acting Deputy Clerk