



December 20, 2018

Mr. Danny Smith, Supervisor
Water Quality Regional Operations
DWR, NCDEQ
Surface Water Protection Section
1628 Mail Service Center
Raleigh, NC 27699-1628

Re: Notice of Violation and Intent to Assess Civil Penalty
Neuse Colony WWTP, Wake County
Permit No. NC1164564
NOV-2018-MC-0156

Dear Mr. Smith:


Aqua North Carolina, Inc. (Aqua) offers the following response to the above-referenced Notice of Violation and Intent to Assess Civil Penalty which was issued for monitoring frequency violations for the month of September.

Aqua's Response:

The new sample frequencies that became effective on 9/1/18 for the Neuse Colony Waste Water Treatment plant were overlooked. Aqua has since implemented measures to ensure that new permits are forwarded to the proper personnel and supervisors so that this will not happen again. As soon as the missed frequencies were realized, we immediately began sampling per the current permit requirements. There was no indication of effluent exceedances during this time period, and no environmental harm was caused by this oversight.

If you have any questions or comments, please do not hesitate to contact me at (919) 653-6964.

Sincerely,


Robert Krueger
Area Manager

cc: Joseph Pearce
Amanda Owens
Shannon Becker



March 29, 2019

Mr. Rick Bolich, L.G., Assistant Supervisor
Water Quality Regional Operations
Raleigh Regional Office
1628 Mail Service Center
Raleigh, NC 27699-1628

Re: Notice of Violation and Intent to Assess Civil Penalty
Neuse Colony WWTP, Wake County
Permit No. NC0064564
NOV-2019-LV-0158

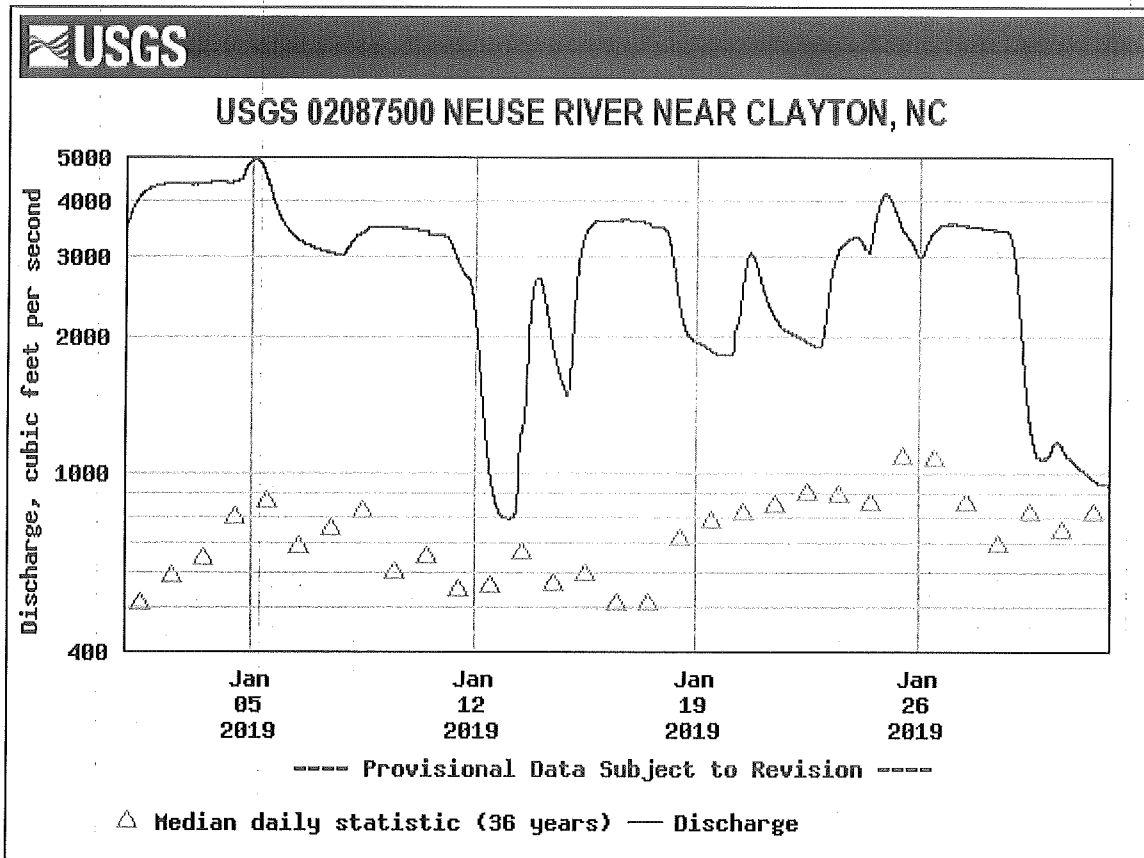
Dear Mr. Bolich:

Aqua North Carolina, Inc. (Aqua) offers the following response to the above-referenced Notice of Violation and Intent to Assess Civil Penalty which was issued for exceeding the daily maximum for nitrogen, ammonia total on multiple dates and exceeding the monthly average flow, in conduit or through treatment plant in the month of January 2019.

Aqua's Response:

The noncompliant exceedances are believed to be the combination of reduced detention time and a mixed liquor concentration that was insufficient to provide complete nitrification. The reduced detention time was due to excessive flow beyond plant design. Aqua raised several manholes, repaired cleanouts, and sealed manhole seams to reduce I&I. With respect to the mixed liquor concentration, when the exceedances were discovered, the operator was informed to stop wasting, and subsequently the plant was also seeded with biomass from another facility. As the temperatures were relatively low, the biomass is slowly increasing its nitrifier population. Current data shows the ammonia effluent concentration is improving. As additional step to relieve the flow issue, an interconnection with Johnston County is underway with the project scheduled to complete in early April 2019. With the interconnection, flow may be diverted to allow sufficient detention with the existing biomass to meet the ammonia limit and the flow limit.

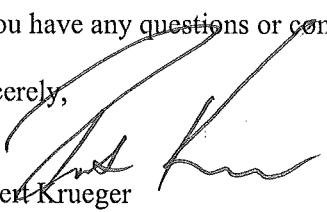
With respect to environmental impacts of the exceedances, below please find the USGS streamflow data for the Neuse River at Clayton in January 2019.



Due to the continuing precipitation events, the Neuse River average flow was in excess of 2500 cubic feet per second (~1600 MGD) in January. The median daily historical data (36 years) indicates a flow of approximately 800 cubic feet per second (~512 MGD). The permitted ammonia load for the facility is 362 pounds per month for January, based on the maximum flow and concentrations in the permit. At the average flow rate for the month, this is equivalent to an instream ammonia concentration of 0.0027 mg/l. At the January 2019 Neuse River flowrates and the Neuse Colony flows and ammonia concentrations, the instream ammonia concentration was 0.00297 mg/l. This actual instream ammonia concentration is only slightly above the permitted concentration at the January average flow for Neuse, and undoubtedly below the corresponding concentration at the Neuse River 7Q10 flow. As such, the environmental impacts of these exceedances are de minimis.

If you have any questions or comments, please do not hesitate to contact me at (919) 653-6982.

Sincerely,


Robert Krueger
Area Manager

cc: Joseph Pearce
Amanda Owens
Shannon Becker



April 19, 2019

Mr. Rick Bolich, L.G., Assistant Supervisor
Water Quality Regional Operations
Raleigh Regional Office
1628 Mail Service Center
Raleigh, NC 27699-1628

Re: Notice of Violation and Intent to Assess Civil Penalty
Neuse Colony WWTP, Johnston County
Permit No. NC0064564
NOV-2019-LV-0265

Dear Mr. Bolich:

Aqua North Carolina, Inc. (Aqua) offers the following response to the above-referenced Notice of Violation and Intent to Assess Civil Penalty which was issued for exceeding ammonia, BOD, and average flow.

Aqua's Response:

The Neuse Colony collection system has been impacted by inflow and infiltration by the continuing wet weather. This has resulted in the flow exceedance. As the operator worked to maintain effluent quality, he reduced the mixed liquor suspended solids concentration. Due to the wastewater temperature, the reduced sludge age, and the reduced detention time nitrification was reduced and resulted in the ammonia exceedances. The mixed liquor concentration was increased, and the plant was seeded with activated sludge from the Tradewinds wastewater treatment plant on February 25, 2019. Ammonia levels began trending downward towards the end of the month.

To relieve the flow issues, Aqua will complete a sanitary sewer evaluation study in some of the older parts of the development. Additionally, an interconnection with Johnston County is almost complete. Over the first two weeks of April, the plant has shown steady improvement; with ammonia levels now within the allowable parameters. BOD is improving, and we expect to be compliant for the April DMR.

If you have any questions or comments, please do not hesitate to contact me at (919) 653-6982.

Sincerely,

A handwritten signature in black ink, appearing to read "R. Krueger", written over a horizontal line.

Robert Krueger
Area Manager

cc: Joseph Pearce
Amanda Owens
Shannon Becker



March 26, 2020

Attn: PERCS Branch
Division of Water Resources
1617 Mail Service Center
Raleigh, NC 27699-1617

and

Mr. Scott Vinson, Regional Supervisor
Water Quality Regional Operations Section
Division of Water Resources
Raleigh Regional Office
1628 Mail Service Center
Raleigh, NC 27699-1628

Re: Notice of Violation and Assessment of Civil Penalty
for Violations of North Carolina General Statute (G.S.) 143-215.1(a) (6)
and Collection System Permit WQCSD0267
Aqua North Carolina Inc.
Chapel Ridge WWTP, Wake County
Permit No. NC0063614
Case No. DV-2020-0039
Wake County

Dear Mr. Vinson:

Aqua North Carolina, Inc. (Aqua) formally request remission for the following violations and penalty assessments for Chapel Ridge Collection System in December 2019.

Aqua's Findings and Request for Remission:

Violation DV-2020-0039 states that Aqua failed to effectively manage, maintain, and operate our collection system that resulted in an unpermitted wastewater discharge. Aqua disputes the findings that the sanitary sewer overflow was a result of negligence or failure to effectively operate or maintain the sanitary collection system.

As stated in the NOV response dated February 19, 2020 - the incident (201901928) was a result of an electrical failure within the control panel. The alarm and telemetry system were installed, operated and maintained in accordance with state regulation, 15A NCAC 02T .0305. Our operator had completed his checks of alarm function and telemetry function in accordance with existing standards of practice. This event is outside the scope of the typical operational regulations. This event was the result of an electrical failure outside of reasonable anticipation or daily, weekly, monthly, or annual inspection requirements. Aqua recognized the electrical failure could occur at other Aqua facilities and took immediate action to remediate across its statewide footprint.

With respect to this specific event, Aqua took mitigation actions as follows:

- All Aqua NC wastewater pump stations have been tested by first disconnecting all sources of power (line power and generator power) and then lifting the high-water alarm.
- In this condition, telemetry systems were tested to ensure it indicated both the loss of power condition and the high-water alarm condition.
- We identified more than 60 pump stations where the simultaneous loss of power and high-water alarm would not result in telemetry notification. Please note the telemetry systems have stand-alone back-up batteries, but the pump control systems did not.
- Aqua is currently upgrading all its pump stations to add this resiliency.

Aqua requests remission of the \$2,035.01 penalty based on Aqua's efforts to promptly abate continuing environmental damage resulting from the violation, efforts to abate future occurrence at other Aqua facilities, and on the premise that this violation could not be adverted or reasonably anticipated

If you have any questions or comments, please do not hesitate to contact me at (919) 653-6982.

Sincerely



Robert Krueger
Area Manager

cc: Joseph Pearce, PE
Amanda Berger
Shannon Becker