



# **VEOLIA WATER NEW YORK INC.**

## **PFAS PROGRESS REPORT**

### **ROCKLAND COUNTY**

4<sup>TH</sup> QUARTER OF 2023  
REVISION B - MARCH 5, 2024



## 1. OVERVIEW

PFOA and PFOS are chemical substances that have been used for decades to manufacture firefighting foam and many common household and consumer products the public uses frequently, including non-stick cookware, fast food packaging, adhesives, paints, shampoo and cosmetics.

Since 2016, states and water providers have followed the Environmental Protection Agency (EPA) health advisory level of 70 parts per trillion (ppt) for PFOA and PFOS in drinking water. Multiple laboratory tests confirmed that Veolia Water New York Inc.'s ("Veolia" or the "Company") water system in Rockland County, New York (Public Water Supply ID#NY4303673) tested well below the 2016 federal advisory levels for these substances. In June 2022, the EPA issued new health advisory levels for PFOA and PFOS which are set at very low levels: 0.004 and 0.02 ppt, respectively, which is below the current detection and reporting limits. Health advisory levels are not binding regulations and are intended to provide technical information that federal and state agencies and local officials can utilize in considering monitoring, treatment, and policy issues.

In late August 2020, the State of New York set a new standard of 10 ppt for PFOA and PFOS in drinking water. In anticipation that the New York State Department of Health would set a new standard for PFOA and PFOS, as it did in 2020, Veolia engineers and water quality experts began investigating and designing treatment solutions in 2019.

Veolia is working closely with the New York State Department of Health and the Rockland County Health Department to achieve compliance by installing the advanced treatment in accordance with approved DOH permits.

Veolia received a deferral from the New York State Department of Health on January 7, 2021 for the implementation of treatment, recognizing the design, testing, permitting, construction, and other activities will take time to complete. As part of the deferral process, the Company submitted a detailed action plan that will ensure that the water system will meet the new State standard and has produced this progress report as a further requirement of the deferral process. In Q3 2022, Veolia submitted a request and received the approval on August 23, 2022 for an additional deferral for the project due to delays in receiving the required approvals to begin the construction of the new treatment facilities.

Please see Section 1.2 Progress Update for additional information on program progress made during the past quarter and for additional information on any new MCL exceedances.

**Q4 2023 - Revision A Update:** *Multiple laboratory QA/QC and data reporting errors for the Q4 compliance sample results as of the January 10, 2024 (original report submission), led to the inability to post the results in the original report or the creation of a supplemental samples results report. The laboratory rectified the issues and sent the information to Veolia on 01/31/2024. These Q4 2023 Revision A documents include the sample results depicted in Table 1-1 and the supplemental sample results report.*

## 1.1. Test Results

The results of compliance and confirmation sampling are summarized in Table 1-1 for the sites with analytical results confirming current or previous MCL exceedance.

**Table 1-1: Sample Test Results**

Well Site	Sample Date*****	PFOS (ppt)	PFOA (ppt)
SW 70	10/2/2020	4.7	11
SW 70	10/14/2020	5.4	11
SW 82	10/1/2020	5.3	12
SW 82	10/22/2020	5.5	12
SW 31A	10/1/2020	3.6	19
SW 31A	10/15/2020	3.8	19
SW 31A	10/22/2020	9.5	14
SW 38	10/2/2020	5.2	11
SW 38	10/15/2020	5.4	11
SW 17	10/2/2020	9	14
SW 1A	10/2/2020	7.2	14
SW 3	10/2/2020	6.4	12
SW 17	10/7/2020	9	15
SW 1A	10/7/2020	7.4	14
SW 3	10/7/2020	5.5	10
SW 20*	10/1/2020*	47*	11*
SW 16	10/1/2020	8.6	16
SW 16	10/14/2020	11	16
SW 20*	10/22/2020*	47*	10*
SW 56	10/2/2020	4.2	11
SW 56	10/14/2020	4.2	10
SW 70	1/13/2021	ND	3.6
SW 82	1/12/2021	5.2	12
SW 31A**	Well out of service in Q1-2021		
SW 38	1/13/2021	3.6	5.9
SW 17	1/13/2021	9.5	13
SW 1A	1/13/2021	7.4	13
SW 3	1/13/2021	6.1	10
SW 20*	1/12/2021	32	8.9
SW 16	1/12/2021	7.3	17
SW 56	1/13/2021	4.6	11

Well Site	Sample Date*****	PFOS (ppt)	PFOA (ppt)
SW 15	1/13/2021	2	12
SW 19	1/12/2021	5.1	13
SW 23	1/12/2021	6.4	11
SW 30	1/12/2021	3.2	11
SW 70***	Well out of service in Q2-2021		
SW 82	4/14/2021	5.8	12
SW 31A	5/20/2021	4.1	18
SW 38	4/14/2021	5.5	11
SW 17	4/13/2021	9	14
SW 1A	4/14/2021	7.6	13
SW 3	6/10/2021	7.6	12
SW 20*	4/14/2021	40	10
SW 16	4/14/2021	10	18
SW 56	4/14/2021	4.8	12
SW 15	4/14/2021	7.3	17
SW 15	4/28/2021	8.3	17
SW 19	4/13/2021	5.3	14
SW 23	4/13/2021	6.3	12
SW 30	4/13/2021	3.5	13
SW 4	4/14/2021	6.7	12
SW 4	5/13/2021	4.9	8.9
SW 38	7/7/2021	5.2	11
SW 19	7/7/2021	5.6	14
SW 17	7/8/2021	9.3	14
SW 1A	7/8/2021	7.5	13
SW 30	7/8/2021	2.9	11
SW 31A	7/8/2021	5.2	18
SW 56	7/8/2021	4.4	11
SW 82	7/8/2021	4.8	11
SW 15	7/8/2021	8.3	18
SW 16	7/8/2021	6.6	15
SW 20*	7/8/2021	3.3	11
SW 23	7/7/2021	5.9	10
SW 3	7/8/2021	5.9	10
SW 4	7/8/2021	2.8	6.2
SW 70***	Well out of service in Q3-2021		

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Well Site	Sample Date*****	PFOS (ppt)	PFOA (ppt)
SW 15 ****	12/2/2021	ND	ND
SW 16	10/5/2021	6.8	14
SW 17	10/6/2021	8.8	13
SW 19	10/6/2021	4.6	14
SW 1A	10/6/2021	7.4	12
SW 20*	10/5/2021	32	11
SW 3	10/6/2021	6.2	9.7
SW 31A	10/6/2021	5.9	18
SW 31A****	12/7/2021	ND	ND
SW 38	10/6/2021	5.3	11
SW 4	11/4/2021	2.6	5.7
SW 56	10/6/2021	4.7	12
SW 82	10/5/2021	5.2	12
SW 30	10/6/2021	3.2	13
SW 6	10/6/2021	3.8	7.5
SW 23	10/6/2021	5.6	11
SW 70***	Out of Service Q4-21		
SW 15***	Out of Service Q1-22		
SW 16	1/5/2022	4	14
SW 17	1/6/2022	8.1	12
SW 19***	Out of Service Q1-22		
SW 1A	1/6/2022	7.7	13
SW 20*	1/5/2022	23	9.8
SW 3	1/6/2022	4	7.2
SW 31A***	Out of Service Q1-22		
SW 38	1/5/2022	5.6	12
SW 4	1/6/2022	2.5	6.4
SW 56	1/6/2022	4.6	11
SW 82	1/5/2022	5.4	12
SW 30	1/6/2022	3.6	12
SW 6	1/6/2022	3.4	6.8
SW 23	1/6/2022	6.6	10
SW 70***	Out of Service Q1-22		
VW 15 (SW 15)	4/11/2022	ND	ND
VW 16 (SW 16)	4/11/2022	4.4	15
VW 17 (SW 17)	4/11/2022	7.6	13

Well Site	Sample Date*****	PFOS (ppt)	PFOA (ppt)
VW 19 (SW 19)***	Out of Service since Q1-22		
VW 1A (SW 1A)	4/11/2022	7.6	13
VW 20 (SW 20)*	4/11/2022	17	9.8
VW 3 (SW 3)	4/11/2022	4.1	7.7
VW 31A (SW 31A)	4/20/2022	ND	ND
VW 38 (SW 38)	4/12/2022	4.7	10
VW 4 (SW 4)	4/20/2022	3.3	7.1
VW 56 (SW 56)	4/11/2022	2.5	4.6
VW 82 (SW 82)	4/12/2022	4.7	11
VW 30 (SW 30)	4/12/2022	3.2	11
VW 6 (SW 6)	4/11/2022	3.4	6.6
VW 23 (SW 23)	4/12/2022	5.2	11
VW 70 (SW 70)***	Out of Service since Q1-22		
VW 15 (SW 15)	8/2/2022	ND	ND
VW 16 (SW 16)	8/2/2022	6.1	16
VW 17 (SW 17)	8/3/2022	9.7	14
VW 19 (SW 19)***	Out of Service since Q1-22		
VW 1A (SW 1A)	8/2/2022	8.6	14
VW 20 (SW 20)*	8/2/2022	24	9.8
VW 3 (SW 3)	8/3/2022	6.1	10
VW 31A (SW 31A)	8/2/2022	ND	ND
VW 38 (SW 38)	8/18/2022	4.8	9.5
VW 4 (SW 4)	8/3/2022	3.7	7.6
VW 56 (SW 56)	8/4/2022	4.9	12
VW 82 (SW 82)	8/3/2022	6	13
VW 30 (SW 30)	8/2/2022	3.9	14
VW 6 (SW 6)	8/3/2022	3.6	7.1
VW 23 (SW 23)	8/2/2022	6.9	13
VW 70 (SW 70)	8/18/22	2.2	5.2
VW 93 (SW 93) †	8/2/22	5.4	12
VW 94 (SW 94) †	8/2/22	4.6	11
VW 93 (SW 93) †	10/6/22	6.7	11
VW 94 (SW 94) †	10/6/22	5.5	9.9
VW 15 (SW 15)	10/25/22	ND	ND
VW 16 (SW 16)	10/18/22	5.2	17
VW 17 (SW 17)	10/27/22	9	13
VW 19 (SW 19)***	Out of Service since Q1-22		

Well Site	Sample Date*****	PFOS (ppt)	PFOA (ppt)
VW 1A (SW 1A)	10/27/22	9.2	14
VW 20 (SW 20)*	10/18/22	24	11
VW 3 (SW 3)	10/27/22	3.9	7.7
VW 31A (SW 31A)	10/26/22	ND	ND
VW 38 (SW 38)	10/18/22	4.9	7.2
VW 4 (SW 4)	10/27/22	3.8	6.8
VW 56 (SW 56)	10/27/22	4.7	10
VW 82 (SW 82)	10/25/22	6.5	13
VW 30 (SW 30)	10/26/22	4.5	14
VW 6 (SW 6)	10/27/22	4	7.1
VW 23 (SW 23)	10/26/22	8.2	13
VW 70 (SW 70)	10/25/22	2.2	4.5
VW 93 (SW 93) †	10/26/22	5.2	5.4
VW 94 (SW 94) †	10/26/22	4	5.8
VW 29 (SW 29) ††	10/27/22	20	11
VW 29 (SW 29) ††	11/29/22	12	7
VW 29 (SW 29) ††	12/5/22	11	6.2
VW 29 (SW 29) ††	12/13/22	7.6	4.1
VW 71 (SW 71) †††	10/25/22	8	12
VW 71 (SW 71) †††	12/8/22	8.6	13
VW 15 (SW 15) **	Out of Service Q1-23		
VW 16 (SW 16)	1/17/23	7.5	15
VW 17 (SW 17)	1/18/23	4.0	7.8
VW 19 (SW 19)**	Out of Service since Q1-23		
VW 1A (SW 1A)	1/18/23	8.7	14
VW 20 (SW 20)*	Out of Service Q1-23		
VW 3 (SW 3)	1/18/23	8.6	13
VW 31A (SW 31A)**	Out of Service Q1-23		
VW 38 (SW 38)**	Out of Service Q1-23		
VW 4 (SW 4)	1/18/23	3.1	7
VW 56 (SW 56)	1/19/23	4.7	11
VW 82 (SW 82)	1/18/23	5.6	12
VW 30 (SW 30)	1/18/23	4.1	13
VW 6 (SW 6)	1/18/23	4.0	7.8
VW 23 (SW 23)	1/18/23	7.5	13
VW 70 (SW 70)***	Out of Service Q1-23		
VW 93 (SW 93) †	1/17/23	ND	ND

Well Site	Sample Date*****	PFOS (ppt)	PFOA (ppt)
VW 94 (SW 94) †	1/17/23	ND	ND
VW 29 (SW 29)††	1/18/23	5.7	3.1
VW 71 (SW 71) †††	Out of Service Q1-23		
VW 28 (SW 28)†	1/17/23	3.8	5.2
VW 28 (SW 28)†	3/29/23	4.0	9.6
VW 15 (SW 15) **	5/8/23	ND	ND
VW 16 (SW 16)	5/22/2023	Lab Error (Resample Needed)	
VW 16 (SW 16) †††	6/13/2023	9.2	17
VW 17 (SW 17)	5/9/2023	Lab Error (Resample Needed)	
VW 17 (SW 17) †††	6/26/2023	9.9	14
VW 19 (SW 19)**	Out of Service Q2-23		
VW 1A (SW 1A)	5/9/2023	Lab Error (Resample Needed)	
VW 1A (SW 1A) †††	6/26/2023	8.6	13
VW 20 (SW 20)*	Out of Service Q2-23		
VW 3 (SW 3)	5/9/2023	Lab Error (Resample Needed)	
VW 3 (SW 3) †††	6/26/2023	5.3	9.5
VW 31A (SW 31A)**	Out of Service Q2-23		
VW 38 (SW 38)	5/9/2023	6.5	8.6
VW 4 (SW 4)	5/9/2023	Lab Error (Resample Needed)	
VW 4 (SW 4) †††	6/26/2023	3.2	6.7
VW 56 (SW 56)	5/9/2023	4.5	11
VW 82 (SW 82)	5/8/2023	4.7	11
VW 30 (SW 30)	Missing	Lab Error (Resample Needed)	
VW 30 (SW 30)†††	7/11/2023	3.7	13
VW 6 (SW 6)	5/9/2023	Lab Error (Resample Needed)	
VW 6 (SW 6)†††	6/26/2023	4.2	7.7
VW 23 (SW 23)	Out of Service Q2-23		
VW 70 (SW 70)***	Out of Service Q2-23		
VW 93 (SW 93)	5/8/2023	Lab Error (Resample Needed)	
VW 93 (SW 93)	6/27/2023	3.1	3.5
VW 94 (SW 94)	5/8/2023	Lab Error (Resample Needed)	
VW 94 (SW 94) †††	6/26/2023	2.6	3.5
VW 29 (SW 29)††	6/26/2023	3.1	2.0
VW 71 (SW 71)	Out of Service Q2-23		
VW 28 (SW 28)†	05/09/2023	4.6	9.3
VW 15 (SW 15)	08/01/2023	10	17



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Well Site	Sample Date*****	PFOS (ppt)	PFOA (ppt)
VW 16 (SW 16)	08/01/2023	10	16
VW 17 (SW 17)	08/01/2023	13	17
VW 19 (SW 19)**	Out of Service Q3-23		
VW 1A (SW 1A)	08/01/2023	ND	2.2
VW 20 (SW 20)	08/23/2023	14	18
VW 3 (SW 3)	08/01/2023	6.7	9.7
VW 31A (SW 31A)	07/31/2023	ND	ND
VW 38 (SW 38)	07/31/2023	4.7	6.8
VW 4 (SW 4)	08/02/2023	4.4	7.3
VW 56 (SW 56)	08/02/2023	6.1	14
VW 82 (SW 82)	08/01/2023	6.4	15
VW 30 (SW 30)	08/02/2023	4.1	14
VW 6 (SW 6)	08/01/2023	4.1	7.1
VW 23 (SW 23)	Out of Service Q3-23		
VW 70 (SW 70)***	Out of Service Q3-23		
VW 93 (SW 93)	07/31/2023	4.5	7.4
VW 94 (SW 94)	07/31/2023	5.9	13
VW 29 (SW 29)	08/01/2023	11	5.2
VW 71 (SW 71)	07/31/2023	ND	ND
VW 28 (SW 28)	08/02/2023	4.9	10
VW 18/24 POE #	10/25/2023	ND	ND
VW 28/106 POE #	10/24/2023	ND	ND
SVWF* POE #	10/23/2023	ND	ND
VW 30 (SW 30) #	10/24/2023	ND	ND
VW 31A (SW 31A) #	10/24/2023	ND	ND
VW 38 (SW 38) #	10/24/2023	ND	ND
VW 70 (SW 70)*** / #	10/23/2023	ND	ND
VW 71 (SW 71) #	10/23/2023	ND	ND
VW 82 (SW 82) #	10/24/2023	ND	ND
VW 15 (SW 15) #	10/24/2023	ND	2.7
VW 16/20 POE #	10/24/2023	ND	ND
VW 19 (SW 19)**/#	Out of Service Q4-23		
VW 23 (SW 23) #	Out of Service Q4-23		
VW 29 (SW 29) #	10/24/2023	7.2	5.6
VW 56 (SW 56) #	10/25/2023	ND	ND
VW 93 (SW 93) #	10/23/2023	5.2	4.2
VW 94 (SW 94) #	10/23/2023	5	5.5
VW 55 ‡	10/24/2023	4.5	13
VW 55 ‡	12/18/2023	2.9	7.3

Well Site	Sample Date*****	PFOS (ppt)	PFOA (ppt)
VW 55 ‡	12/27/2023	4.7	10
VW 65 ‡	10/23/2023	7.7	13
VW 65 ‡	12/18/2023	5.3	9.1
VW 65 ‡	12/27/2023	5.5	8.6

**Notes:**

**Red** font indicates concentrations greater than the new New York State Drinking Water Standard of 10 parts per trillion (ppt) and require treatment.

**Gray** shading indicates sample results from previous periods

\* VW 20 has been shut down for many years and will not be used until treatment is installed.

\*\* VW 31A, 15 and 19 were out of service in Q1-22 due to lower demand

VW 23 was placed and remains out of service for many years.

\*\*\* VW 70 was out of service in Q2-21, Q3-21, Q4-21, Q1-22, Q2-22, and Q4-23

\*\*\*\* VW 15 & VW 31A PFOA & PFOS results were non-detect after implementation of treatment upgrades in Q4-21

All well, VW designations have been renamed VW as of Q2 due to Veolia's purchase of SUEZ.

\*\*\*\*\* Analytical results depicted from 9/2020 through 6/2022 are EPA Method 537. Analytical results from 7/2022 to date are EPA Method 533. EPA Method 537.1 data from 7/2022 to date is available in the Supplemental Report.

† Wells VW 93 and VW 94 sampling results exceeded the MCL for PFOA for the first time in Q3 2022. Results from Q4 2022 show that PFOA is back below the MCL at both wells.

†† Well VW 29 sampling results exceeded the MCL for PFOA & PFOS for the first time in Q4 2022. Three confirmatory samples were collected within the quarter. Based on the average results this well exceeded the MCL for PFOS in Q4 2022.

††† Well VW 71 sampling results exceeded the MCL for PFOA for the first time in Q4 2022. One confirmatory sample was collected within the quarter and the result confirmed a MCL exceedance for PFOA for this well in Q4 2022. Treatment for this site is under construction. Well 71 offline in Q1 and Q2 2023.

↑ Well VW 28 sampling results for Method 533 for PFOA was less than the MCL. The result for PFOA by Method 537.1 was above the MCL for the first time. A resample was collected on 3/29/2023 to verify the results. Once received, should the average of all the Well 28 samples results trigger an MCL exceedance, a revised report will be submitted. Treatment for this site is under construction with completion scheduled by Q3 2023. Update 6-29-23: Result did not exceed MCL and is depicted in the table.

↑↑ Beginning Q2 2023, Veolia Water New York made the following changes to its PFAS sampling protocol. Method 533 is used to analyze all 25 unique PFAS compounds covered by this Method as indicated on the US EPA, Office of Water, table number MS-140 dated December 2019. Method 537.1 is used to analyze only the 4 additional PFAS compounds not addressed by Method 533 as presented in the same above reference EPA table. Supplemental reports will also reflect this change beginning Q2 2023.

↑↑↑ Multiple Q2 2023 Samples required resampling due to analytical laboratory error. Resample results are pending as of the submission of this Q2 report. Results have been updated in the Q3 report.

# Several systems were placed into service in Q3 and Q4 2023, see table in Section 1.2. Data reflects point of entry [POE] (after treatment only). Individual wells that are part of a larger wellfield (>1 well treated by a single treatment plant) are not individually depicted in Table 1-1 due to ease of understanding for compliance. Additional data on Raw Combine (combined wells before treatment and Lead Vessel Effluent (between lead and lead vessels of the PFAS treatment) are presented in the supplemental report. **Q4 2023 - Revision A Update: Multiple laboratory QA/QC and data**

*reporting errors for the Q4 compliance sample results as of the January 10, 2024 (original report submission), led to the inability to post the results in the original report or the creation of a supplemental samples results report. The laboratory rectified the issues and sent the information to Veolia on 01/31/2024. These Q4 2023 Revision A documents include the sample results depicted in Table 1-1 and the supplemental sample results report.*

‡ Well VW 55 and VW 65 sampling results exceeded the MCL for PFOA for the first time in Q4 2023. Two confirmatory samples were collected within the quarter and the result confirmed a MCL exceedance for PFOA for these wells in Q4 2023. Design for treatment for these sites is under development following these exceedances.

## 1.2. Progress Update

### New Rockland County MCL Exceedances in Q4 2023

Well VW 55 and VW 65 sampling results exceeded the MCL for PFOA for the first time in Q4 2023. Two confirmatory samples were collected within the quarter and the result confirmed a MCL exceedance for PFOA for these wells in Q4 2023. Design for treatment for these sites is under development following these exceedances.

### General Q4 2023 Program Updates

As of the fourth quarter of 2023, Veolia made significant progress on multiple fronts to meet the new standards for PFOA and PFOS in New York State. Veolia Water New York has placed 11 systems into service as of the end of Q4 (See table below). Tallman 26 was turned off at the end of Q3 pending either installation of temporary or permanent treatment to remain compliant with deferral requirements.

The table below depicts the sites that have receive PFAS treatment:

Site/ Wells	DOH Submission	DOH Approval	Placed in Service
New Hempstead 18/24	11/4/22	11/15/22	11/30/22
Pomona 38	6/29/23	7/12/23	7/20/23
Eckerson 71	7/5/23	7/12/23	7/28/23
Eckerson 82	7/24/23	8/4/23	8/10/23
Monsey 30	7/31/23	8/4/23	8/11/23
Willow Tree 56	8/4/23	8/9/23	8/14/23
Tappan 16/20	8/2/23	8/8/23	8/16/23
Monsey 31A	7/19/23	8/11/23	8/17/23
Viola 28/106	8/11/23	8/17/23	8/21/23
Spring Valley Well Field (1A,3,4,6,17)	8/9/23	8/17/23	8/23/23
Birchwood 70	8/11/23	9/18/23	10/11/23*

\* Added with November 13, 2023 revision.

Veolia continues to monitor all sites in the Rockland County service territory to evaluate the need for treatment at additional sites as sampling results approach or exceed current MCL requirements. Veolia is also reviewing the impact of the proposed PFAS National Primary Drinking Water Regulation announced during Q1 2023 and is developing our PFAS Treatment Strategy to meet the compliance requirements for the rule.

## 1.3. Action Plan Schedule - Key Milestones

Veolia is moving as quickly as possible to complete the implementation of treatment solutions and in an effort to complete the work on or around 24 months. However, circumstances beyond VWN's control, including unavailability of local permitting resources and unprecedented supply chain constraints associated with COVID-19 are expected to delay 'Treatment Facilities in Service' by up to eighteen (18) months. The original estimated completion dates and actual completion dates are summarized in Table 1-2 for the impacted sites.

**Table 1-2: Project Schedule**

Milestone	Initial Estimated Completion Date	Actual Completion Date
Treatment Equipment Bidding	4 <sup>th</sup> Quarter 2020	4 <sup>th</sup> Quarter 2020
Engineering, Procurement, and Construction Award	1 <sup>st</sup> Quarter 2021	1 <sup>st</sup> Quarter 2021
Complete Design / Submit for Permitting Review	2 <sup>nd</sup> Quarter 2021	2 <sup>nd</sup> Quarter 2021
Commence Project Construction / Implementation	4 <sup>th</sup> Quarter 2021	4 <sup>th</sup> Quarter 2021 (partial)*
Treatment Facilities In Service	3 <sup>rd</sup> Quarter 2022	Partial 3 <sup>rd</sup> Quarter 2023

\*Mobilization for construction start was completed for three sites in Q4-21, one additional site in Q2-22, four additional sites in Q3-22, and 3 additional sites in Q4-22. One site is still pending local approval to commence construction and temporary treatment or placing the well out of service pending permanent treatment options are under consideration.

## 1.4. Potential Schedule Impacts

The installation of water quality treatment must be planned and constructed carefully to ensure effectiveness. There are several steps that must be taken prior to implementation of treatment in a drinking water system, including:

- Bench testing and studies
- Issuance of a requests for proposal for design services, permitting services, equipment fabrication, and construction
- Contract award and execution for above services

- Detailed design
- Permitting
- Construction
- Start-up and commissioning

Similarly, several industry resources, many of whom are independent and outside of a water utility's management or control (as listed below), are needed to fully execute the treatment plan, which could result in unanticipated delays:

- Availability of laboratories to manage the volume and reporting of water quality data
- Availability of consulting services needed:
  - o to conduct bench and/or pilot scale studies to develop treatment design criteria
  - o to detail treatment design and preparation of permit applications
  - o to develop construction bid documents
  - o to procure construction contracts,
- Availability of construction services needed install and commission treatment facilities
- Availability of appropriate commercial treatment equipment and media
- Availability of Health Department and local planning board for permitting and review processes
- Approval from other utilities (I.e., Orange and Rockland)

Permits and/or approvals are anticipated to be required from the following agencies:

- Rockland County Department of Health
- New York State Department of Health
- New York State Department of Environmental Conservation
- Town Planning Board and Building Department.
- Town Board, Architectural Commission and/or Zoning Board of Appeals may also be required, depending on whether the design requires a variance

During the detailed design of the treatment facilities, permitting constraints outside of Veolia's control are expected to result in unanticipated delays. The permitting constraints include unavailability of local planning boards for permitting and review processes, and various site constraints, including zoning and environmental conflicts. Delays due to local Planning Board resources are estimated at up to six months or more.

Supply chain constraints associated with COVID-19 have caused unanticipated delays in the fabrication and delivery of materials and equipment, ranging from stainless steel vessels to building materials to freight carriers. Delays due to materials and equipment resources are currently estimated at up to three months or more. Veolia's proactive efforts to release major materials for fabrication in parallel with permitting reviews and to source alternate vendors are expected to mitigate schedule delays by three months.

In addition, many large and medium-sized public community water systems and non-community water systems will need to comply with the new regulations at approximately the same time, potentially creating bottlenecks in the above areas and resulting in schedule impacts.

Despite Veolia's affirmative efforts to meet all existing project milestones, the hardships beyond Veolia's control (noted above) are predicted to cause up to eighteen (18) months of delay, which required an additional deferral from the State as of Q3 2022. This additional deferral was approved on August 23, 2022.

## 1.5. Implementation of Interim Measures

Interim measures continue to be implemented to reduce the use of certain sources that have exceeded the new State standard for PFOA and PFOS. These measures will be taken as feasible under normal system operating conditions during average day demand periods only. Peak demand periods and/or changes in these conditions such as a main break, failure of another source or a large extended fire, or other conditions as deemed necessary by Veolia, would entail utilization of any and all sources as needed to maintain adequate supply and pressure to our customers and communities we serve. Veolia will continue to operate the water system to maintain proper flow, pressure, and to optimize water quality for our customers and the communities we serve at all times.

## 1.6. Emergency Conditions

No emergency conditions or changes in demand impacted the implementation of interim measures in the previous quarter.