



SUEZ WATER NEW YORK INC. PFAS PROGRESS REPORT

2nd QUARTER OF 2021



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.

For years, states and water providers have followed the Environmental Protection Agency (EPA) health advisory limit of 70 parts per trillion (ppt) for PFOA and PFOS in drinking water. Multiple laboratory tests confirm that SUEZ Water New York Inc.'s ("SUEZ" or the "Company") water system in Rockland County, New York (Public Water Supply ID#NY4303673) has tested well below the federal advisory levels for these substances.

While concentrations of PFOA and PFOS in our New York water supply have not changed, in late August 2020, the State of New York set a new standard of 10 ppt for these substances in drinking water.

In accordance with the new requirements, SUEZ took additional samples from its reservoir and well water sources in October. Most sites tested below both the federal health limit of 70 ppt and the new state standard of 10 ppt. Assuming that these levels remain under the State standard, these sites will require no additional treatment. In addition, SUEZ will add treatment to certain sites that are now below the State standard, but may be at risk of exceeding the standard in the future.

Those sites that tested above the new state standard remain well below the federal level of 70 ppt, but will require treatment to meet the new State requirements.

SUEZ is working closely with the New York State Department of Health and the Rockland County Health Department to achieve compliance by installing advanced treatment.

In anticipation that the New York State Department of Health would set a new standard for PFOA and PFOS, as it has done in 2020, SUEZ engineers and water quality experts began investigating and designing treatment solutions in 2019.

SUEZ received a deferral from the New York State Department of Health on January 8, 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 standard and has produced this progress report as a further requirement of the deferral process.

1.1. Test Results

The results of compliance and confirmation sampling are summarized in Table 1-1 for the sites with analytical results confirming a 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 POE	10/1/2020	5.3	12
SW 82	10/22/2020	5.5	12
SW 31A POE	10/1/2020	3.6	19
SW 31A	10/15/2020	3.8	19
SW 31A Raw	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 POE	10/1/2020	8.6	16
SW 16	10/14/2020	11	16
SW 20*	10/22/2020*	47*	10*
SW 56 POE	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**	N/A	N/A	N/A
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
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

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

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

**SW 31A was out of service in Q1-21

1.2. Progress Update

SUEZ continues to identify treatment requirements, including design and construction needs for PFOA/PFOS treatment facilities and procurement of Granular Activated Carbon (GAC) vessels, which is identified as the Best Available Technology for the treatment of PFOA/PFOS. SUEZ's proactive efforts, including bench testing studies for treatment alternatives, design for treatment equipment and facilities, and bidding for long-lead time equipment, began in advance of New York State's adoption of the new state standard for PFOA and PFAS, and as early as 2019 for certain sites.

In the second quarter of 2021, SUEZ made progress on multiple fronts to meet the new standards for PFOA and PFOS in New York State.

SUEZ reviewed design drawings for the treatment equipment in the second quarter of 2021. Because the treatment equipment delivery times may extend beyond one year due to demand, SUEZ released long lead time materials for fabrication for nine well sites and closely coordinated prioritization of equipment among the multiple sites. Current estimated delivery dates for equipment range from nine to twelve months.

Additionally, SUEZ has awarded general construction at 12 well sites (20 wells) in Rockland County to design and construct the required treatment facilities, including all structural, architectural, process piping, electrical, HVAC, and instrumentation and control components needed to provide a fully functional treatment system in compliance with state and local codes and regulations. SUEZ continues to proactively add treatment to certain sites that are now below the State standard, but may be at risk of exceeding the standard in the future.

1.3. Action Plan Schedule - Key Milestones

SUEZ is moving as quickly as possible to complete the implementation of treatment solutions and expects to complete the work on or around 24 months. The current estimated completion dates and actual completion dates are summarized in Table 1-2 for the impacted sites.

Table 1-2: Project Schedule

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

Notes:

*contracts for treatment solutions were awarded at 11 well sites (18 wells) in the 1st quarter of 2021

**local and/or DOH permit applications were submitted at 12 well sites (20 wells) in the 2nd quarter of 2021

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:
 - to conduct bench and/or pilot scale studies to develop treatment design criteria
 - to detail treatment design and preparation of permit applications
 - to develop construction bid documents
 - 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

Supply chain constraints associated with COVID-19 have caused unanticipated delays in the fabrication of materials and equipment, ranging from stainless steel vessels to building materials to valves to controllers. Delays due to materials and equipment resources are currently estimated at least one to three months.

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 have been identified that may result in unanticipated delays. The permitting constraints include potential wetlands conflicts. Delays due to permitting resources are unknown at this time.

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.

1.5. Implementation of Interim Measures

Interim measures are being 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 SUEZ, would entail utilization of any and all sources as needed to maintain adequate supply and pressure to our customers and communities we serve. SUEZ 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.

SUEZ prepared Carbon Changeout Sampling Plans and submitted to Rockland County DOH for review, requesting the use of an alternate treatment media type that is more effective for PFOA/PFOS removal for at least two well sites in Rockland County in the 2nd quarter of 2021. Upon review and acceptance by DOH, the alternate treatment media will be installed as expeditiously as possible.

1.6. Emergency Conditions

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