



Station 20, Well 20

Evergreen Avenue, New Hyde Park, N.Y.

Update: April 7, 2022	
Status:	In Service May 14, 2021
NYS Allowable levels:	1,4 – dioxane (1 part per billion) PFOS (10 parts per trillion) PFOA (10 parts per trillion)
Most Recent Raw Water Test Results: (Samples Collected on March 10, 2022)	1,4 – dioxane (.390 part per billion) PFOS (8.9 parts per trillion) PFOA (12.7 parts per trillion)
Most Recent Treated Water Test Results: (Samples Collected on March 10, 2022)	PFOS (<1.8 parts per trillion) PFOA (<1.8 parts per trillion)
Construction Project for the Installation of Granular Activated Carbon (“GAC”) vessels to remove PFOS/PFOA.	
Phase 1 Construction Project Chronological Progress:	
<p>May 2020 Pilot Study Performed</p> <p>August 2020 Pilot Study Report Sent to NYS Department of Health (“NYSDOH”)</p> <p>October 2020 Full Site Engineering Report Complete and Sent to NYSDOH</p> <p>November 2020 Project Plans and Specifications Complete and sent to NYSDOH</p> <p>December 2020 Construction Start Date with Estimated Completion Date of April 2021</p> <p>March 15, 2021 GAC Vessels Arrived</p> <p>May 2021 Well Startup and Completed Works Approval</p>	
Regulatory Approvals Dates	<p>Pilot Study Report April 2021</p> <p>Full Engineering Report April 2021</p> <p>Approval of Overall Project May 13, 2021</p> <p>TOWN DPW Drainage Approval April 29, 2021</p>

County DPW Drainage Approval March 29, 2021

Phase 1 Current Status

All water assets are now installed and in-service effective May 14, 2021. On July 3, 2021 the booster motor failed and the well is temporarily out of service. Emergency protocol was taken to replace the motor. The motor has been replaced and Station is back in service.

Phase 2 Construction Project Permanent Building and Site Work Chronological Progress:

January 2021 Design of Permanent GAC Building

March 2021 Bid Date

July 1, 2021 Construction Start Date. The project experienced a 2 month delay on building construction resulting from PSEG breaker installation. Construction scaffolding was within 10 feet of overhead power lines. Other contractor delays occurred from labor impact from pandemic and supplies availability. New completion target Date is April 30, 2022.

Phase 3 Construction Project Installation of AOP Treatment, Replacement of Elevated Storage Tank and Site Rehabilitation

Estimated Date of Engineering Report December 2022

Project Start Date September 2023

Estimated Completion Date December 2024

Station 28, Well 28

Miriam Parkway, Elmont, N.Y.

Update: April 7, 2022	
Status:	June 2021 In Service (Out of Service since Dec. 19, 2021)
NYS Allowable levels:	1,4 – dioxane (1 part per billion) PFOS (10 parts per trillion) PFOA (10 parts per trillion)
Most Recent Raw Water Test Results: (Well is out of service since December 19, 2021)	1,4 – dioxane (ND parts per billion) PFOS (parts per trillion) PFOA (parts per trillion)
Most Recent Treated Water Test Results: (Well is out of service since December 19, 2021)	PFOS (<1.8 parts per trillion) PFOA (<1.8 parts per trillion)
Construction Project for the Installation of Granular Activated Carbon (“GAC”) vessels to remove PFOS/PFOA.	
Phase 1 Construction Project Chronological Progress:	
November 2019 Full Site Engineering Report Complete and Sent to NYSDOH November 2019 Project Plans and Specifications Complete and sent to NYSDOH December 2019 Construction Start Date with Estimated Completion Date of May 2020 June 2020 Well Startup and Completed Works Approval	
Regulatory Approvals Dates	Full Engineering Report March 2020 Approval of Overall Project June 2020
Phase 2 Construction Project Temporary Fabric Enclosures:	
January 2021 Enclosure Installation Started February 2021 Enclosure Installation Complete	
Phase 3 Construction of Permanent Building around GAC Vessels	
Permanent building installation to take place beginning January 2023	

**** Well 28 running to system through new treatment. Water quality is in compliance with all NYSDOH Standards. GAC valve froze in December 2021 and replacement valve has been delayed by manufacturer.

Station 35, Well 35A

Cisney Avenue, Floral Park, N.Y.

Update: April 7, 2022	
Status:	June 2021 In Service
NYS Allowable levels:	1,4 – dioxane (1 part per billion) PFOS (10 parts per trillion) PFOA (10 parts per trillion)
Most Recent Raw Water Test Results: (Samples collected Mar. 15, 2022)	1,4 – dioxane (.600 parts per billion) PFOS (5.8 parts per trillion) PFOA (9.2 parts per trillion)
Most Recent Treated Water Test Results: (Samples collected Mar. 15, 2022)	1,4 – dioxane (<.020 parts per billion) PFOS (<1.8 parts per trillion) PFOA (<1.8 parts per trillion)
Construction Project for the Installation of Granular Activated Carbon (“GAC”) vessels to remove PFOS/PFOA and installation of Ultraviolet Advanced Oxidation Process (“AOP”) to remove 1,4 – dioxane.	
Phase 1 Construction Project Chronological Progress:	
<p>April 2020 Pilot Study Performed</p> <p>August 2020 Pilot Study Report Sent to NYS Department of Health (“NYSDOH”)</p> <p>October 2020 Full Site Engineering Report Complete and Sent to NYSDOH</p> <p>December 2020 Project Plans and Specifications Complete and sent to NYSDOH</p> <p>January 2021 Construction Start Date with Estimated Completion Date of August 2021</p> <p>GAC Vessels Arrived April 26, 2021</p> <p>AOP Enclosure Arrived March 4, 2021</p> <p>AOP Reactor Arrived April 13, 2021</p> <p>Completed Works Approval January 20, 2022</p> <p>Well Startup March 2, 2022</p>	
Regulatory Approvals Dates	<p>Pilot Study Report March 2021</p> <p>Full Engineering Report NCDOH April 2021</p>

NYSDOH Approval of Overall Project August 30, 2021

Phase 1 Current Status

The Water Authority experienced several weeks of delay due to weather conditions. The AOP enclosure arrived on March 4, 2021 and is set. The AOP reactor arrived on April 13, 2021. The GAC vessel manufacturer delayed delivery by one month and were ultimately delivered on April 26th. Given the proximity of this site to the LIRR we were required to receive Coordination approval which delayed setting the vessels for over one additional month. During these delays contractors continued to work on site piping and other essential project items. The Station was shut down during the last week of June 2021 and the AOP reactor was then energized. The contractor has completed the AOP reactor checklist which was followed with a full review by Trojan Industries. Carbon delivery has taken place. Laboratory tests on GAC vessels have been taken and backwashing of vessels continues. Contractor labor issues continue to slow down all emerging contaminant projects as a result of many projects underway throughout the water industry. The Completed works approval was received January 20, 2022 and well went to system March 2, 2022. Small punchlist items remain under Phase 1 contract.

Phase 2 Construction Project Permanent GAC Building and Site Work Chronological Progress:

April 2021 Design of Permanent GAC Building

April 26, 2021 Was Bid Opening for Permanent GAC Building

Notice to Proceed was given to contractor on October 4, 2021 for Permanent GAC Building. The project is moving along well and the building is currently weatherproof and heaters have been installed to prevent freezing of the GAC vessels. All materials have been received with the exception of building windows due in May 2022. Project completion date is June 15, 2022.

Phase 3 Construction Project Demolition of Existing Well House to Raise Wells and Site Rehabilitation Work:

Project will start in 2024 following the installation of all Water Authority wellhead treatment for emerging contaminants for all Water Authority impacted wells.

Note: Well 35 at this site is out of service due to high levels of iron.

Station 40, Wells 40 & 40A (Headquarters Site) Union Turnpike, New Hyde Park, N.Y.

April 7, 2022	
Status:	June 2021 In Service
NYS Allowable levels:	1,4 – dioxane (1 part per billion) PFOS (10 parts per trillion) PFOA (10 parts per trillion)
Most Recent Raw Water Test Results:	
Well 40 (Samples collected March 10, 2022)	1,4 – dioxane (.540 parts per billion) PFOS (4.0 parts per trillion) PFOA (9.6 parts per trillion)
Well 40A (Samples collected March 10, 2022)	1,4 – dioxane (1.10 parts per billion) PFOS (5.3 parts per trillion) PFOA (10.2 parts per trillion)
Construction Project for the Installation of Granular Activated Carbon (“GAC”) vessels to remove PFOS/PFOA and installation of Ultraviolet Advanced Oxidation Process (“AOP”) to remove 1,4 – dioxane.	
Phase 1 Construction Project Chronological Progress:	
April 2020 Pilot Study Performed	
August 2020 Pilot Study Report Sent to NYS Department of Health (“NYSDOH”)	
Regulatory Approvals Dates	Pilot Study Report March 2021 Full Engineering Report NCDOH April 2021 (Awaiting comments from NYSDOH) Approval of Overall Project December 2021 Blending Application Sent to NYSDOH and NCDOH on April 20, 2021. Approval of Blending application has been received on Sept. 29, 2021.
*Water Authority is awaiting NYSDOH comments on Pilot Study.	

Available space for wellhead treatment at this site is an obstacle to preparing the full engineering report and to prepare project design and specifications. This site serves as the Water Authority headquarters location.

In December 2020 the Water Authority acquired one section of property adjacent to this well station. The Water Authority has begun action to acquire a second property adjacent to this site which will provide adequate space for the installation of new wellhead treatment systems. Eminent Domain procedures have begun, a public hearing was scheduled for April and May of 2021 but were adjourned due to ongoing negotiations with owner. Negotiations have now reached an agreement. Second property is now owned by the Water Authority. Engineering design has received board approval. Soil borings, site survey and hazardous material inspection is scheduled for the second week of April 2022.

The Water Authority has instructed the engineering firm of H2M Group to prepare a request for blending proposal of the two wells located at Station 40. This report was sent on April 20, 2021 and approval received from the NCDOH on Sept. 29, 2021. The Engineering Report is expected to be complete by January 2022 using the assumption that the adjacent property is acquired. DOH approval is expected several months following submission. Water currently produced is blended. The Water Authority has now approved the Engineering design and project management since the second parcel has been secured to house the water treatment assets.

Potential delays could occur toward the procurement of necessary treatment system assets. It is expected to take 3-4 months to obtain GAC vessels and 6-7 months to obtain an AOP reactor. Contractor labor issues continue to slow down all emerging contaminant projects as a result of many projects underway throughout the water industry.

Station 44, Wells 44, 44A, 44B, 44C Chelsea Street, Elmont, N.Y.

Update: April 7, 2022	
Status:	June 2021 In Service
NYS Allowable levels:	1,4 – dioxane (1 part per billion) PFOS (10 parts per trillion) PFOA (10 parts per trillion)
Most Recent Raw Water Test Results:	
Well 44 (PFOS/PFOA Samples collected Mar. 8, 2022) Quarterly 1, 4 – dioxane samples collected Jan. 11, 2022	1,4 – dioxane (.021 parts per billion) PFOS (9.0 parts per trillion) PFOA (14.1 parts per trillion)
Well 44A (PFOS/PFOA Samples collected Mar. 8, 2022) Quarterly 1, 4 – dioxane samples collected Jan. 11, 2022	1,4 – dioxane (0.150 parts per billion) PFOS (14.2 parts per trillion) PFOA (14.7 parts per trillion)
Well 44B (PFOS/PFOA Samples collected Mar. 8, 2022) Quarterly 1, 4 – dioxane samples collected Jan. 11, 2022	1,4 – dioxane (0.024 parts per billion) PFOS (13.6 parts per trillion) PFOA (21.0 parts per trillion)
Well 44C (PFOS/PFOA Samples collected Dec. 14, 2021) Quarterly 1, 4 – dioxane samples collected Jan. 11, 2022	1,4 – dioxane (0.022 parts per billion) PFOS (10.9 parts per trillion) PFOA (16.5 parts per trillion)
Most Recent Treated Water Test Results:	
Well 44 / 44A (Samples collected Mar. 8, 2022)	PFOS (<1.8 parts per trillion)

	PFOA (<1.8 parts per trillion)
Well 44B / 44C (Samples collected Mar. 8, 2022)	PFOS (<1.8 parts per trillion) PFOA (<1.8 parts per trillion)
Construction Project for the Installation of Granular Activated Carbon (“GAC”) vessels to remove PFOS/PFOA.	
Phase 1 Construction Project Chronological Progress:	
September 2019 Full Engineering report complete and sent to NYSDOH November 2019 Project design and specifications complete and sent to NYSDOH December 2019 Project Construction begins January 2020 Calgon Carbon column testing performed	
Actual Regulatory Approval Dates	Full Engineering Report March 2020 Design Approval April 2020 Approval of Overall Project in Service June 2020
Phase 2 Construction Project Temporary Fabric Vessel Enclosures:	
December 2020 Construction of Fabric tent enclosures around 2 sets of vessels January 2021 Tent Enclosures are Complete	
Phase 3 Construction Project Permanent Treatment Buildings, Raising Wells and full site Rehabilitation:	
Design and Specifications for Public Bidding is 75% complete July 2022 Construction starts Project length is estimated at 2 years	
****Wells 44, 44A, 44B and 44C running to system through new treatment. Water quality is in compliance with all NYSDOH Standards.	

Station 57, Wells 57, 57A

South 6th Street, New Hyde Park, N.Y.

Update: April 7, 2022	
Status:	Out of Service since October 15, 2020
NYS Allowable levels:	1,4 – dioxane (1 part per billion) PFOS (10 parts per trillion) PFOA (10 parts per trillion)
Most Recent Raw Water Test Results (last test October 2020):	
Well 57	1,4 – dioxane (14.5 parts per billion) PFOS (7.9 parts per trillion) PFOA (68.7 parts per trillion)
Well 57A	1,4 – dioxane (11.9 parts per billion) PFOS (4.8 parts per trillion) PFOA (61.9 parts per trillion)
Construction Project for the Installation of Granular Activated Carbon (“GAC”) vessels to remove PFOS/PFOA and installation of Ultraviolet Advanced Oxidation Process (“AOP) to remove 1,4 – dioxane.	
Phase 1 Construction Project Chronological Progress of Full Site Rehabilitation:	
December 2016 Acquired property adjacent to this site	
September 2018 Pilot Study Performed	
March 2019 Pilot Study Report Sent to NYS Department of Health (“NYSDOH”)	
June 2019 Full Engineering report complete and sent to NYSDOH	
January 2020 Project design and specifications complete and sent to NYSDOH	
October 2020 Project Construction begins with Estimated Completion Date of June 30, 2022	
Estimated Regulatory Approval Dates	Pilot Study Report July 2019 Full Engineering Report May 2020 Approval of Overall Project May 2022
This project includes a full site rehabilitation including demolition of all existing buildings, raising wells, new air stripper tower, new emergency generator, replacement of all water	

assets and appurtenances and new wellhead treatment for the removal of emerging contaminants.

Current Status

The Water Authority experienced several weeks delay resulting from Winter weather conditions. There were also delays due to unexpected storage tank piping. This project includes full demolition of assets which is complete. The Air Stripper and GAC buildings have foundations in place and walls are being formed at this time. Site piping was delayed for one month and is now well underway. Walls to the Air Stripper building and GAC building began last week. The AOP reactor has already been delivered and is stored off site. The Air Stripper and GAC vessels were set in place during the week of May 14, 2021. The Emergency Generator was delivered to the site on June 9, 2021. National Grid has informed us that a new larger size, high pressure gas line is now required for this generator. This gas line was provided April 4, 2022. All buildings are constructed. We are awaiting gas service for emergency generator. Well pumps are installed and meets design criteria. Well contractor is removing them to determine issues. HVAC is 90 % complete. During the next two weeks performance testing will take place. Control systems are being terminated.

We expect completion of this project in May 2022 for Completed Works Approval and full project completion in June 2022.