

Update on Wellhead Treatment Progress, Potential Issues and Water Quality Update

Report Date: July 8, 2021

Facility: Plant 6

Prepared by: Michael Levy, Superintendent

Milestone	Date	On Schedule (Y/N) Or Completed	Notes and Comments
Complete treatment piloting	11/20/2019	Completed	Final report submitted on 1/20/19 with engineering report, approved by NYSDOH on 9/9/2020
Completed engineering report/submit for regulatory review	1/20/2020	Completed	Submitted to NYSDOH, Approved by NYSDOH on 9/9/20
Complete project design/submit for regulatory review	3/6/2020	Completed	Submitted to NYSDOH, Approved by NYSDOH on 9/9/20
Commence project Construction	4/1/2020	On Schedule	Contract signing date
Approval to Operate	3/24/2021	Completed	NYS DOH has authorized the AOP system to be placed into service
Approval to Operate	5/7/2021	Completed	Nassau County authorized the GAC/AOP system to be placed into service

Potential issues / concerns /delays:

Plant 6 is located at the corner of Hickory Rd. and Denton Ave. It should be noted that the 1, 4 Dioxane levels at well 6 are below the maximum contaminant level. The New York State Department of Health has authorized the use of the AOP treatment system with enhanced water quality protocols in place. Additionally, existing GAC treatment at the plant removes PFOS/PFOA to levels below the maximum contaminant level. As of May 10th 2021 the treatment for 1, 4 Dioxane with AOP has been placed into service.

Water Quality Update – See attached summary

Garden City Park Water District
PWS ID No. NY2902825
Quarterly Deferral Update

Update on Wellhead Treatment Progress, Potential Issues and Water Quality Update

Report Date: July 8, 2021

Facility: Plant 7/10

Prepared by: Michael Levy, Superintendent

Milestone	Date	On Schedule (Y/N) Or Completed	Notes and Comments
Complete treatment piloting	N/A		
Completed engineering report/submit for regulatory review	11/19/2019	Completed	Submitted to NYSDOH, Approved by NYSDOH on 6/10/2020
Complete project design/submit for regulatory review	01/15/2020	Completed	Submitted to NYSDOH, Approved by NYSDOH on 6/10/2020 (including GAC for PFAS treatment and provisions for future AOP treatment)
Commence project Construction	5/22/2020	On Schedule	Contract signing date
50% project completion	6/22/2020	On Schedule	
Other	10/16/2020		NCDOH / NYSDOH Approval of completed works to run GAC treatment to system
100% project completion	Spring 2021	On Schedule	

Potential issues / concerns /delays:

Plant 7/10 is located on Shelter Rock Road in Roslyn. Treatment for PFOA is installed and operational. As of 10/16/2020 the plant is producing system water with levels of PFOS and PFOA below detectable limits. Winter weather has delayed the completion of the project, but treatment is in place and operational.

Water Quality Update – See attached summary

Garden City Park Water District
PWS ID No. NY2902825
Quarterly Deferral Update

Update on Wellhead Treatment Progress, Potential Issues and Water Quality Update

Report Date: July 8, 2021

Facility: Plant 8

Prepared by: Michael Levy, Superintendent

Milestone	Date	On Schedule (Y/N) Or Completed	Notes and Comments
Complete treatment piloting	7/18/2018		Calgon AOP Pilot – Calgon AOP reactor to be removed and replaced with UV/H2O2 AOP treatment
Completed engineering report/submit for regulatory review	6/1/2021	Tentative	Engineering report for new UV/H2O2 AOP treatment
Complete project design/submit for regulatory review	8/1/2021	Tentative	Project design for UV/H2O2
GAC Filters ordered	12/10/2020		Purchase order issued for GAC filters
Commence project Construction	10/1/2021	Tentative	
50% project completion	1/1/2022	Tentative	
100% project completion			

Potential issues / concerns /delays:

Well 8 is located on Old Courthouse Rd. in Manhasset Hills. An existing Calgon AOP system will be removed and new Trojan UV/H2O2 will be installed. Production from this well has been suspended and will only be used in an emergency. It is the Districts intention to keep the well offline until treatment for both 1,4 Dioxane and PFAS is installed

Water Quality Update – See attached summary

Garden City Park Water District
PWS ID No. NY2902825
Quarterly Deferral Update

Update on Wellhead Treatment Progress, Potential Issues and Water Quality Update

Report Date: July 8, 2021

Facility: Plant 9

Prepared by: Michael Levy, Superintendent

Milestone	Date	On Schedule (Y/N) Or Completed	Notes and Comments
Complete treatment piloting	11/26/2019	Completed	Field work completed 11/26/2019
Completed engineering report/submit for regulatory review	1/22/2020	Completed	Submitted to NYSDOH, Approved by NYSDOH on 10/30/2020
Complete project design/submit for regulatory review	3/13/2020	Completed	Submitted to NYSDOH, Approved by NYSDOH on 10/30/2020
Commence project Construction	3/10/2020	Complete	Contract signing date
50% project completion	4/29/2020	Yes	
Other	12/30/2020	Complete	Authorization to operate well to system received from NYSDOH
Well back in service	3/31/2021	Complete	Well placed back in to service with 1,4 Dioxane and PFOA treatment online
100% project completion	Summer 2021		

Potential issues / concerns /delays:

Plant 9 located on County Courthouse Road has been upgraded with on AOP reactor and GAC filters to remove 1, 4 Dioxane and PFOA contaminants. Performance testing of these systems has been completed and authorization to operate has been granted. On March 31, 2021 the plant was placed back into service with treatment systems online and operational. Water produced at this facility has lemits below detectable levels for both 1, 4 Dioxane and PFOA contaminants. Construction of the building and site will continue through the spring and summer.

Water Quality Update – See attached summary

Update on Wellhead Treatment Progress, Potential Issues and Water Quality Update**Report Date: July 8, 2021****Facility: Plant 11****Prepared by: Michael Levy, Superintendent**

Milestone	Date	On Schedule (Y/N) Or Completed	Notes and Comments
Complete treatment piloting	N/A		
Completed engineering report/submit for regulatory review	N/A		
Complete project design/submit for regulatory review	10/27/2020 10/28/2020	Complete	Laboratory sampling following carbon replacement to confirm PFOA removal
Commence project Construction/Implementation	11/13/2020	Complete	NCHD Approval to Operate
50% project completion			
Other			Existing GAC approved by NCHD for PFOA removal

Potential issues / concerns /delays:

Well #11 is located on Links Drive in North Hills. Existing GAC filters installed for VOC removal have been approved for PFOA removal. Required sampling for PFOA will assure the filter bed is replaced when no longer removing efficiently.

Water Quality Update – See attached summary

**Garden City Park Water District
1, 4 Dioxane, PFOA and PFOS Water Quality Summary**

Status as of July 1, 2021

Location	Date Sampled	1,4 Dioxane (ppb)	PFOA (ppt)	PFOS (ppt)	PFBS** (ppt)	PFHpA** (ppt)	PFHxS** (ppt)	PFNA** (ppt)	Notes and Comments
Plant 6 Well #6	6/03/201	BDL (MCL is 1 ppb)	BDL (MCL is 10ppt)	BDL (MCL is 10ppt)	BDL	BDL	BDL	BDL	Wellhead treatment for 1,4 Dioxane and PFOA/PFAS is operational as of May 7 th 2021
Plant 7/10									
Well #7	6/11/2021	.13	BDL	BDL	BDL	BDL	BDL	BDL	Wellhead treatment for PFOA/PFOS is installed and operational. No wellhead treatment for 1,4 Dioxane is required
Well #10	6/11/2021	.18	BDL	BDL	BDL	BDL	BDL	BDL	Wellhead treatment for PFOA/PFOS is installed and operational. No wellhead treatment for 1,4 Dioxane is required
Plant 8 Well #8	6/15/2021	8.7	61.0	15.0	BDL	4.5	3.1	3.2	Well is Out of Service Design of wellhead treatment for 1,4 Dioxane and PFOA is ongoing
Plant 9 Well #9	6/01/2021	BDL	BDL	BDL	BDL	BDL	BDL	BDL	Wellhead treatment for 1,4 Dioxane and PFOA/PFAS is operational as of April 2021
Plant 11 Well #11	6/11/2021	.16	BDL	BDL	BDL	BDL	BDL	BDL	Wellhead treatment for PFOA/PFAS is operational. No wellhead treatment for 1,4 Dioxane is required

Notes:

Sample results are post treatment levels
ppt – part per trillion

MCL – Maximum Contamination Level
ppb – part per billion

BDL – Below Detectable Limit

PFOA – Perfluorooctanoic acid
PFOS – Perfluorooctanesulfonic acid

PFBS – Perfluorobutanesulfonic acid **
PFHpA – Perfluoroheptanoic acid **

PFHxS – Perfluorohexanesulfonic acid **
PFNA – Perflurononanoic acid **

** Additional perfluorinated compounds tested for but are not currently regulated