

**TOWN OF HEMPSTEAD
1,4 DIOXANE AND PFOA/PFOS REMOVAL PROJECTS
QUARTERLY REPORT**

In support of the Department of Water's Deferral Application

Second Quarter 2021

**Prepared by the Town of Hempstead Department of Water
PWSID #NY2900000
July 8, 2021**

Executive Summary

The following Quarterly Report was prepared by the Town of Hempstead Department of Water (Department) to provide an update and status of the improvements being planned and constructed by the Department to our customers and the New York State Department of Health (NYSDOH) and Nassau County Department of Health (NCDOH) and covers the period from April 1, 2021 through June 30, 2021.

This report will provide a project by project update on the progress and efforts made during the previous three month period, any modification to the planned timeline of improvement milestones along with an explanation and justification for the modification. Finally Appendix A of this report contains 1,4 dioxane test results for all Department wells which ran to system during the second quarter of 2021.

General Information Regarding Department-Wide Operations

As discussed in previous quarters, upon official notification of the granting of a deferral from the NYSDOH the Department created a page on its website dedicated to emerging contaminant information (www.hempsteadny.gov/water-department/eci) and sent a letter to every consumer advising them of the deferral and making them aware of the webpage and its contents. There is a link to the page from the homepage directory of the Town website as well as prominent links throughout the Departments page on the website. The Department continued to provide a note on bills regarding the ECI page as well as the website information of the front of every water bill issued by the Department advising consumers of the important information provided on the page.

In the second quarter of 2021 the Town of Hempstead board adopted a resolution authorizing the use of the Trojan UV Flex system at the sole vendor of ultraviolet light generators for the Departments AOP projects. This resolution is supported by the fact that all systems pilot tested and submitted for approval by the Department of Water have utilized the Trojan UV Flex system. By doing so, the Department of Water was able to prepare pre-purchase documents and solicit price proposals directly from Trojan to purchase UV generators ahead of the final approval of full design plans and prior to letting and awarding construction bid documents essentially shortening the lead time on these critical components of the AOP process. The Department has issued purchase requisitions for five such systems to date and has a number of others ready to issue shortly.

1995 Prospect Avenue (west) East Meadow Well 1 (N3456) and East Meadow Well 3 (N3465)

The Department's consultant on this project, P.W.Grosser (PWG) finished the preparation of the its pilot study report and Basis of Design Report (BODR) and submitted these documents for review and approval to the NYSDOH and NCDOH on March 11, 2021 ahead of schedule. The Department has received a letter of approval on the design report from NYSDOH. While awaiting approval of these documents PWG is moving forward with the detailed design drawings. The Department and PWG held a brief phone meeting prior to PWGs submission of

60% design drawings on June 27, 2021. These are currently under review by Department staff and comments will be forwarded to PWG shortly.

East Meadow Well 1 continued to operate in a last on first off scenario. Well 3 did not run to system in Q2 due to an electrical failure, accordingly no samples were drawn for this well and no laboratory results are included in Appendix A

**1995 Prospect Avenue (east) East Meadow Well 5 (N4448) and
East Meadow Well 11 (N7797)**

H2M Consulting Engineers (H2M) the consultant retained for the design work on this project has received comments on the Pilot Study and BODR submitted in a previous quarter and has revised the necessary documents and returned to NYSDOH and NCDOH for their final approval.

H2M and the Department met to review and discuss 90% design drawings and the Department directed H2M to progress towards final drawings which will be amended and revised as needed based on comments received from the Health Departments.

The Department has solicited materials quotes from Trojan for the UV reactors necessary for this project and has issued purchase requisitions for the same in order to expedite material lead time on this project.

Well 11 continues to be voluntarily removed from service due to elevated nitrate levels and did not run to system during this quarter.

Oak Street Well Site Uniondale Well 5 (N8474) and Uniondale Well 6 (N8475)

In Q2 90% design drawings for this project were completed and are being reviewed. Applications and load letters were prepared and submitted to the necessary utilities for the construction of the project so that once construction begins there will be no delays for these efforts. Specifications have been developed and quotes obtained from Trojan for the UV reactors for this project and purchase documents were prepared.

Hilltop Well Site Levittown Well 1A (N13887) and 2A (N8231)

As stated in the previous quarters report, the BODR was finalized and submitted by H2M for review and approval on February 1, 2021 which was on target for the revised submission milestone.

This early delay is not holding up the project as our consultant has been designing the project parallel to the report development which will be amended and revised as needed based on comments received from the Health Departments. The Department is awaiting final design drawings which reflect comments made on previous progress drawings and site plans for this project. It is understood that the final design may require some modifications or revisions based on the comments from the Health Departments.

The Department has solicited materials quotes from Trojan for the UV reactors necessary for this project and has issued purchase requisitions for the same in order to expedite material lead time on this project

Both Wells 1A and 2A remain voluntarily out of service due to elevated nitrate levels.

Market Lane well site Levittown Well 5A (N7076) and Levittown Well 6B (N12560)

Having obtained approval of the BODR in a previous quarter, the Department's consultant, H2M finalized design drawings for submission to the NYSDOH and NCDOH. The Department prepared bid documents and has advertised their availability. Bids are returnable in early Q3 and award will follow. Construction will be authorized upon approval of the design drawings by the NCDOH and NYSDOH.

The Department has solicited materials quotes from Trojan for the UV reactors necessary for this project and has issued purchase requisitions for the same in order to expedite material lead time on this project

Entry Lane Levittown, Levittown Well 13 (N5303)

Having obtained approval of the BODR in a previous quarter, the Department's consultant, H2M finalized design drawings for submission to the NYSDOH and NCDOH. The Department prepared bid documents and has advertised their availability. Bids are returnable in early Q3 and award will follow. Construction will be authorized upon approval of the design drawings by NCDOH and NYSDOH.

The Department has solicited materials quotes from Trojan for the UV reactors necessary for this project and has issued purchase requisitions for the same in order to expedite material lead time on this project

Dibblee Drive Well Site Roosevelt Field Well 7 (N9521), Well 11 (N13524) and Well 12 (N13525)

As stated in a previous quarter, due to recently received water quality information, Well 12 has been voluntarily removed from service. Our consultant held numerous conference calls with various agencies to discuss treatment alternatives for treatment of well 12 as well as the anticipated need to treat wells 7 and 11 as they are proximate to 12. Additionally the Department has met with neighboring property owners regarding acquiring land for these treatment needs, Based on the outcomes of these meetings design has resumed on this project with a vastly widened scope to incorporate additional treatment for these new needs. Additionally the scope has been widened to include the construction of a booster station between Uniondale and Roosevelt Field to allow for additional capacity to the district during construction.

Bowling Lane Well Site Levittown Well 7A (N8279) and Levittown Well 8A (N7523)

During Q2 the Department awarded a contract for professional design service for this site to H2M based on their response to an RFP issued by the Department. An onsite project kickoff meeting was held on June 11, 2021 and pilot testing began with the collection of scavenging samples for analysis by Trojan.

Iris Place Well Site Bowling Green Well 1 (8956) and Bowling Green Well 2 (N8957)

During Q2 the Department awarded a contract for professional design service for this site to Dvirka and Bartilucci based on their response to an RFP issued by the Department. A virtual project kickoff meeting was held on June 21, 2021 and pilot testing began with the collection of scavenging samples for analysis by Trojan.

As previously discussed, a major component of design work at this site involves a study to determine the feasibility of installing an AOP treatment system for the removal of 1,4 dioxane as well as the reduction of organic concentrations at these wells and if deemed feasible. The Department and Dvirka and Bartilucci have determined that additional property may need to be acquired to accommodate treatment improvements and this process has begun with the drafting of letters to adjacent property owners.

These wells remain out of service voluntarily.

East Meadow Site II East Meadow Well 6 (N5318) and Well 8 (N5320)

During Q2 the Department awarded a contract for professional design service for this site to Dvirka and Bartilucci based on their response to an RFP issued by the Department. A virtual project kickoff meeting was held on June 21, 2021 and pilot testing began with the collection of scavenging samples for analysis by Trojan. The Town is working with Dvirka & Bartilucci to fast track this project by utilizing existing site characteristics which allow for the adaptation of pre-designed building improvements which will substantially speed up the design process.

Roosevelt Field Well 5 (N7957)

No work was contemplated for this well during the first quarter of 2021. This well remains voluntarily out of service.

APPENDIX A

1,4 Dioxane Results (ug/L)

WELL	2018	2019	4th Q 2020	1st Q 2021	2nd Q 2021
EM1	4.3	5.6	2.6	3.9	4.2
EM3	0.76	0.79	0.85	0.30	O/S
EM5	0.46	0.61	0.59	0.67	0.83
EM6	0.48	0.34	0.25	0.32	0.36
EM8	0.11	0.91	0.71	0.74	0.77
EM10	0.87	0.40	0.61	0.53	0.58
EM11	1.2	1.2	1.3	1.5	1.6 *
UN1	0.15	<0.20	0.17	0.21	0.29
UN2	<0.10	0.069	0.08	0.11	0.12
UN3	<0.070	<0.020	<0.07	<0.07	<0.07
UN4	0.25	0.25	0.16	0.17	0.16
UN5	1.3	1.4	1.5	1.3	1.6
UN6	2.7	2.9	3.4	4.1	3.6 *
LEV1A	0.31	3.7*	4.1	4.4	4.7 *
LEV2A	4.0	3.4	2.6	2.7	6/29/2021 */**
LEV5A	0.47	0.31	0.35	0.36	0.39
LEV6B	1.6	1.4	1.6	1.2	0.97
LEV7A	1.0	0.91	1.6	0.97	1.1
LEV8A	0.27	0.28	1.0	1.0	1.3
LEV12	0.37	0.38	0.12	0.10	0.13
LEV13	<0.070	1.4	1.8	1.4	1.7
LEV14	<0.020	<0.020	<0.07	<0.07	<0.07
RF5	3.1	3.5	1.4	1.1	1.2 *
RF7	0.97	0.97	1.4	1.4	1.6
RF10	0.21	0.18	0.29	0.22	0.19
RF11	1.6	0.72	1.1	1.1	1.3
RF12	1.5	1.5	1.6	1.4	1.4 *
BG1	2.6	2.3	2.2	2.2	2 *
BG2	1.5	1.4	1.5	1.5	1.6 *
LPL1A	<0.070	<0.020	<0.07	<0.07	<0.07
LPL2A	<0.070	<0.020	<0.07	<0.07	<0.07
LIDO3			<0.07	<0.07	<0.07

* Well is currently not running to system

** Samples collect 6/29/21, Results not yet received from laboratory