

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

**In support of the Department of Water's Deferral Application**

**First Quarter 2021**

**Prepared by the Town of Hempstead Department of Water  
PWSID #NY2900000  
April 7, 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 January 1, 2021 through March 31, 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 first quarter of 2021.

## **General Information Regarding Department-Wide Operations**

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](http://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 direct web address is also provided on every water bill issues by the Department advising consumers of the important information provided on the page.

The ECI page contains a summary of the deferral, a summary of the work to date, a brief description of the AOP treatment process and a summary of the Departments funding plan. The page also has links to an electronic copy of the letter sent to all consumers advising them of the deferral (copy of the letter is included as Appendix B of this report) and advising them of the availability of further information of the website, the full context of the deferral, the project schedule spreadsheet, the NYSDOH factsheet on 1,4 dioxane and finally all quarterly reports as they are completed.

The Department of Water has prepared a resolution for consideration by the Town Board of the Town of Hempstead at their next meeting 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 can now fast-track the purchasing of UV generators ahead of the final approval of full design plans essentially shortening the lead time on these critical components of the AOP process.

**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. While awaiting approval of these documents PWG is moving forward with the detailed design drawings. The Department and PWG held an online meeting on March 2, 2021 to review the preliminary design drawings including building and site layouts. From this meeting PWG was given directives on how to move forward with the detailed design for this project and the Department is awaiting submission of 30% progress drawings.

East Meadow Well 1 continued to operate in a last on first off scenario.

### **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 had submitted the Pilot Study and BODR in a previous quarter and is awaiting comments and/or approval of the document.

Parallel to the preparation of the BODR and while awaiting approval of this document, H2M has been preparing design drawings which will be amended and revised as needed based on comments received from the Health Departments. On March 3, 2021 a virtual meeting was held between the Department of Water and H2M to review a 60% design submission of these plans. Based on the outcome of this meeting design work has continued toward final drawings.

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)**

Pilot Testing and optimization runs were completed at this site in the previous quarter. D&B Engineers and Architects (D&B) the Department's engineering consultants for this project completed and submitted a BODR for review and approval on February 8, 2021 which was slightly delayed due to COVID-19 related delays at the laboratory performing the work. This delay is not holding up the project as our consultant moved ahead with design on this project parallel to the report development. It is understood that the plans may require amending or revision based on comments received from the Health Departments.

On March 15, 2021 a virtual meeting was held between the Department of Water and D&B to review a 60% design submission of these plans. Based on the outcome of this meeting design work has continued toward pre-final drawings.

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

As stated in the previous quarters report, our consultant on this project H2M experienced a slight delay in the completion of the BODR as they gathered information from various sources regarding the ion-exchange equipment currently operating at another Town facility to include

this information in the BODR. 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 and H2M held a virtual meeting on March 9, 2021 to review the 30% design drawings and site plans for this project and as a result H2M has been directed to progress forward with the proposed design with minor modifications. It is understood that the final design may require some modifications or revisions based on the comments from the Health Departments.

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 the Department's consultant, H2M addressed the comments from the Departments of Health and finalized design drawings for submission. Design drawings were submitted to the Departments of Health on March 10, 2021 for their review and approval. The Department has begun the process of preparing bid documents for this project so that bids may be solicited immediately upon approval of the design drawings.

#### **Entry Lane Levittown, Levittown Well 13 (N5303)**

Having obtained approval of the BODR the Department's consultant, H2M addressed the comments from the Departments of Health and finalized design drawings for submission. Design drawings were submitted to the Departments of Health on March 3, 2021; our previously revised schedule date was March 1, 2021; for their review and approval.

The Department has begun the process of preparing bid documents for this project so that bids may be solicited immediately upon approval of the design drawings.

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

Our consultant for this project D&B submitted the BODR for this project on February 26, 2021 which was slightly delayed from the January 15, 2021 scheduled date. As previously discussed this delay was anticipated as there was a delay in completing the laboratory analysis due to a COVID shutdown at the laboratory during pilot testing. Despite this delay, the consultant continues to move forward on the design drawings.

Due to recently received water quality information, Well 12 has been voluntarily removed from service temporarily. This information is being analyzed by the Department and D&B to determine the proper course of action to address these new concerns and incorporate the improvements into the design currently underway. Once final decisions are made, D&B will submit a BODR for the new treatment modifications.

The Department and D&B held virtual meetings on March 9, 2021 and March 30, 2021 to discuss the project and review preliminary design drawings and schemes to determine the best avenue to bring treatment for this site online on schedule. Based on the outcome of these meetings design work has continued.

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

The Department issued its 2021 RFQ for professional services and at the March 9, 2021 meeting of the Town Board a panel of qualified firms was approved. As a result of the establishment of this list the Department issued a Request for Proposals (RFP) from those firms qualified on March 23, 2021 for design services for a 1,4 Dioxane treatment system for these wells. The RFP is returnable April 16, 2021. The Department is prepared to fast track the review of these proposals and make a recommendation to the Town Board for award of these services at their next meeting. The RFP documents emphasized the tight timeline for this project and review scoring is being weighted to provide extra credit to firms exhibiting the staff, skills and experience to bring this project in on schedule.

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

The Department issued its 2021 RFQ for professional services and at the March 9, 2021 meeting of the Town Board a panel of qualified firms was approved. As a result of the establishment of this list the Department issued a Request for Proposals (RFP) from those firms qualified on March 23, 2021 to study 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 to perform the design services for a 1,4 Dioxane treatment system for these wells. The RFP is returnable April 16, 2021. The Department is prepared to fast track the review of these proposals and make a recommendation to the Town Board for award of these services at their next meeting.

These wells remain out of service voluntarily.

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

The Department issued its 2021 RFQ for professional services and at the March 9, 2021 meeting of the Town Board a panel of qualified firms was approved. As a result of the establishment of this list the Department issued a Request for Proposals (RFP) from those firms qualified on March 23, 2021 for design services for a 1,4 Dioxane treatment system for these wells. The RFP is returnable April 16, 2021. The Department is prepared to fast track the review of these proposals and make a recommendation to the Town Board for award of these services at their next meeting. The RFP documents emphasized the tight timeline for this project and review scoring is being weighted to provide extra credit to firms exhibiting the staff, skills and experience to bring this project in on schedule.

#### **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 (parts per billion))

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

\* well is currently not running to system

## APPENDIX B

