## SUFFOLK COUNTY WATER AUTHORITY

# **Production Control - Bay Shore, New York**

### INTER-OFFICE CORRESPONDENCE

**DATE:** August 23, 2021

**TO:** Jeffrey Szabo, CEO

**FROM:** Michael O'Connell, Director of Production Control

Timothy Kilcommons, P.E., Chief Engineer & Dir. of R&D

**SUBJECT:** Emerging Contaminants Action Plan Monthly Update

The Suffolk County Water Authority has for years proactively addressed emerging contaminants in groundwater such as the perfluorinated compounds PFOA and PFOS and 1,4-dioxane, both through comprehensive testing and the development and implementation of innovative treatment technologies.

The following is the latest monthly update to the Emerging Contaminants Action Plan requested by the SCWA Board to provide the public with up-to-date information about the steps being taken to ensure that SCWA meets or surpasses the rigorous regulations established by New York State to remove these compounds from our groundwater. This update covers the period from July 13, 2021 to date.

### PFC's

Since the last update, two new GAC systems were installed at Hallock Ave (Smithtown) and Horseblock Rd (Farmingville). Construction Maintenance is currently installing the underground piping. Once complete, Production Control will be the process of loading them with carbon and placing them in service.

These two wells are the last SCWA wells that have PFC levels above the MCL. They are both currently blended to below the MCL. Future GAC installs will be addressing those wells that are over ½ the MCL of 10 ppt. and the purchasing process has begun for the next six sets of GAC vessels.

### 1,4-dioxane

SCWA submitted final contract plans to NYSDOH for the Smith St East Farmingdale AOP system in late March 2021. The Health Department approved these plans on June 1, 2021. The bid documents for this AOP have been published and the bid opening is on August 31, 2021.

Design work and contract preparation continues with regards to the mechanical installation, controls, and peroxide delivery systems contracts that will be required to build the AOP systems. Site work continues for future AOP sites and electrical upgrade work where required continues. The Furnish &

Deliver contract for 16 AOP reactors representing the wells at sites awarded WIIA grants had a bid opening date of January 21, 2021. The bid was awarded to Xylem, Inc. and they have executed the contract and a Purchase Order has been issued. We are now in the submittal approval stage. Delivery of the first four reactors is currently projected to be in November 2021. The mechanical and electrical plans for Flower Hill Rd were submitted to NYSDOH in early June for their review and approval. We received comments from both the NYS DOH and the SC DOH. The contracts have been put out for bid and the bid opening date is set for September 8, 2021.

Two contracts were awarded for AOP building additions at 7 locations: Hollywood Pl, McKay Rd, Waterside Dr, Sunken Meadow Park, Broadway, Falcon Dr, and Flower Hill Rd. These additions will house 13 AOP systems. Foundation work is complete at Flower Hill Rd. and Falcon Dr. The steel frame and siding is being installed at these two sites. Metal building additions have been completed at Waterside Rd, Hollywood Pl and McKay Rd. The electrical contractor will begin installing lights and heat in these three additions.

At Douglas Ave (Northport), demolition of the existing structures next door was completed on 06/17/21 and two new GAC systems have been received. Construction Maintenance will begin the yard piping for these new GACs shortly. CM has completed the installation of piping for two new GAC systems at Lawrence Rd (Kings Park) for future AOP systems at that site.

The AOP pilot work needed to obtain NYSDOH approval for the use of AOP at any of our sites has been completed. Production Control staff utilizing our mini-AOP reactor pilot trailer have completed pilot testing of twenty-nine (29) wells. Analysis of the data obtained to date has revealed no surprises in terms of by-product formation resulting from the AOP process. In June, the Authority requested a waiver from further pilot testing from NYSDOH due to the extensive amount of data already provided and similar results at every site we have piloted. Initial feedback on this request has been positive although no formal approval has been received. Another requirement for AOP system design is Water Quality Characterization. This is necessary for every well receiving AOP treatment. It helps identify compounds besides 1,4 dioxane that may be competing for the hydroxyl radicals created during AOP. SCWA has entered into an agreement with the University of North Carolina at Charlotte to perform this testing. We have shipped samples from several wells to UNC @ Charlotte already.

The new well Old Dock Rd #2 (Kings Park) has been drilled and the well building is currently under construction. CM has installed the yard piping tie-ins. This well was drilled with the knowledge that it will require an AOP treatment system. It will replace Carlson Ave #5 and #6 (Kings Park), both of which require AOP but are very old wells and are located on a site that does not have enough room for more treatment systems.

### **Emerging Contaminant Wells Current Status**

As of this writing, all wells that have PFOA or PFOS above the MCL are either being treated to remove the contaminants, are being blended to below the MCL or have been removed from service

until treatment is installed. Wells that are above ½ of the MCL continue to be blended or have their run time managed to maintain lower levels.

Similar strategies apply to 1,4-dioxane management. We continue to add blending where we can. As water demand has increased with the warmer weather, we have had to utilize wells that have 1,4-dioxane levels above the MCL. Wells with levels of 1,4-dioxane over the MCL are programmed in our SCADA system that they are the last wells on and the first wells off. This approach ensures that the water entering our system has the lowest possible 1,4-dioxane concentrations while at the same time ensures our ability to meet demand for both domestic and emergency use by our customers. We are also scheduling and exchanging carbon on all wells that have exceeded the MCL where we have a carbon system in place. Carbon does remove 1,4-dioxane, not well, but it does for a short period of time. Therefore, with new carbon, we can keep the levels as low as possible. This has and will continue to escalate our carbon and labor expenses.

SCWA applied for a MCL deferral to the NYSDOH. The application was approved on January 7, 2021.

Cc: J. Pokorny

K. Durk

T. Hopkins

PFOA / PFOS

MCL = 10 ppt

						Date Treatment		
			Recent levels	Current		I/S or Blend		Authorization(s
Zone	Station	Well	(PFOA/PFOS)	Status	Action plan (Planning window = 4 months)	Started	Authorization(s)	Value to Date (\$
1	Bellmore Ave	1	15/19	I/S	On GAC	4/24/2020	195-20-00-0068	\$ 37,51
1	Church St Hol	1A	9.5/3.8	I/S	On outdoor GAC - Seasonal	5/7/2019		
1	Church St Hol	2	8.7/4.6	O/S	O/S 11/2/18 - pending additional GAC installation			
					Received DHS approval to treat with resin (ion exchange) in portable GAC system; first			
1	Foxcroft Ln	1A	5.1/30	I/S	approval of resin for PFC's in NY. Outdoors - seasonal	5/30/2019	055-18-00-0019	\$ 165,59
1	Foxcroft Ln	2	8.1/5.0	I/S	Blended inside #1A - Seasonal well, #1A seasonal GAC. Last blend was 4.4/2.7	7/18/2019		
1	Smith St	8	ND/5.3	I/S	Monitor			
1	Station Rd	1A	11/50	I/S	On outdoor GAC - Seasonal	3/14/2020	055-19-00-0015	\$ 417,76
1	Station Rd	2A	4.4/2.7	I/S	Runs inside Well #1A when #1A is in service.			
10	Ruth Blvd	3	ND/7.8	I/S	Piped to existing GAC. Monitor		055-19-00-0018	\$ 23,05
11	St. Johnsland Rd	1	4.5/2.8	I/S	Monitor - new to list 06/21 (6.1/2.8)			,
12	Blue Point Rd	1	6.4/4.4	I/S	Blended with any other well. Last blend 3.7/2.9	10/31/2016		
12	Carrol St	2	4.1/2.5	I/S	Blended - no further action planned	8/18/2016		
12	Hallock Ave	1	ND/16	ı/S	Blend with Well #2 and #3 - GAC piping nearing completion	5/11/2021		
12	Hallock Ave	2	ND/8.5	ı/S		, ,		
12	Hallock Ave	3	ND/7.6	ı/S	With rotations, runs every other day		195-21-00-0061	\$ 758,86
12	Horseblock Rd	2	5.7/ND	I/S	Monitor - new to list 08/21			,
			,	, -	, and the second			
12	Liberty St	2	8.1/5.3	I/S	With rotations, runs every other day - GAC from Douglas to go here over winter			
12	Liberty St	3	7.2/3.1	I/S	With rotations, runs every other day - no further action planned			
			, -	, -	Blended; New GAC vessels delivered. Yard piping completed. Sampling new piping.			
12	Lincoln Ave	2	4.8/17	I/S	Well I/S and assigned to GAC "B" 03/19/2021.	3/19/2021	195-21-00-0065	\$ 549,85
12	Morris Ave	1	4.7/3.9	I/S	Monitor - Has been Non detect when Well #4 is in service	2, 2, 2	195-20-00-0059	\$ 576,04
12	Morris Ave	4	4/19	I/S	On outdoor GAC - Seasonal	6/28/2020	195-20-00-0054	\$ 118,79
12	Pierson St	1	10/4.3	I/S	Assigned to new GAC "A" system 5/10/21	5/10/2021	195-21-00-0068	\$ 639,16
					GAC delivered 12/30/20. Piping by CM complete. Initital carbon fill scheduled 5/24/21.	3, 23, 232		, ,,,,,,
12	Pierson St	2	13/9.8	I/S	Well assigned to GAC 5/26/21	5/26/2021	195-21-00-0068	\$ 639,16
12	Plymouth St	1A	8.2/13.0	I/S	Assigned to new GAC "B" system 4/13/2021	4/13/2021	195-21-00-0062	\$ 634,04
12	Plymouth St	2A	6.2/10	I/S	Assigned to new GAC "A" system 4/29/2021	4/29/2021	195-21-00-0062	\$ 634,04
12	Station Rd	3A	5.4/3.5	I/S	Monitor - Level goes down when #1A is in service in summer	,, ==, ====		7 55.1,5
			51.1, 51.5	., -			195-20-00-0056,	
12	Sy Ct	3	14/6.3	I/S	On outdoor GAC - Seasonal	10/28/2020	195-20-00-0061	\$ 724,51
12	Townline Rd Nes	1A	9/14	I/S	On GAC	2/10/2020	055-19-00-0014	\$ 100,41
12	Wheeler Rd	3	22/16	I/S	Well I/S and assigned to GAC "A" 03/08/21	3/8/2021	195-21-00-0063	\$ 75,43
12	Wheeler Rd	4	ND/2.9		Since Well #3 went on GAC, levels have dropped more than 70%. Monitor	0,0,2021		70,40
12	Wheeler Rd	5	2.5/6.5	I/S	On GAC - Was 18/32, big drop in level at HOP in March '21	9/6/2019	055-19-00-0017	\$ 15,88
12	William Floyd Pkwy	3A	2.1/6.8	I/S	Monitor - Level has been below 5.0. Can blend if needed.	0,0,2013	130 20 0017	15,60
15	Bicycle Path	1	7.8/2.4	1/5	Blended for Mn for many years. Monitor. Last blend was 2.3/ND			
13	Diegene i deii	-	7.0/2.4	1,5	Sienaea for thin for many years. Monitor: East Siena was 2.5/110			
15	Boyle Rd PJ	2	8.0/4.3	I/S	Blended for nitrates for many years. Last blend was 4.8/2.3. Next round of GACs	7/31/2007		

						Date Treatment		
			Recent levels	Current		I/S or Blend		Authorization(s)
Zone	Station	Well	(PFOA/PFOS)	Status	Action plan (Planning window = 4 months)	Started	Authorization(s)	Value to Date (\$)
15	Boyle Rd South	1	5.5/4.2	I/S	Monitor			
15	Crystal Brook Hollw	4	5.3/7.0	I/S	Monitor - new to list 08/21			
15	Daniel Webster Dr	1	5.5/2.4	I/S	Monitor			
15	Dare Rd	2	5.3/4.7	I/S	No action planned, continue to monitor			
15	Edgewood SJ	1A	13.0/5.9	I/S	New GAC vessels installed in existing building. Assigned to GAC 05/14/21	5/14/2021	195-21-00-0064	\$ 579,263
							055-19-00-0021,	
15	Fairmount Medford	3	22/33	I/S	On outdoor GAC - Seasonal	5/19/2020	195-20-00-0052	\$ 609,567
15	Flint Ln	1	4.8/2.9		New GAC will load in Spring. Assigned to new GAC "B" 05/28/21	5/28/2021	195-20-00-0057	\$ 157,860
15	Flint Ln	2	5.4/6.0		New GAC will load in Spring. Assigned to new GAC "B" 05/15/21	5/15/2021	195-20-00-0063	\$ 1,051,739
15	Hawkins Rd	3	4.4/5.9	I/S	Continue to monitor			. ,
15	Horseblock Rd	1	10/3.5		Already blended for nitrates. GAC System yard piping nearing completion	5/12/2013	195-21-00-0067	\$ 724,023
15	Oxhead Rd	1A	3.8/110.0	I/S	On outdoor GAC - Seasonal	6/7/2017	055-17-00-0014	\$ 265,494
15	Oxhead Rd	2A	6.4/6.7	I/S	Blended inside #3. Last blend was 4.1/4.7	5/20/2017		, ,,,,,
15	Oxhead Rd	4	2.3/5.3		Blended inside #1A, Last blend was ND/5.6	7/1/2017		
		•	2.0,0.0	., -		-7-7-2-1	195-20-00-0058,	
15	Stem Ln	1	6.2/23	I/S	On outdoor GAC - Seasonal	8/6/2020	195-20-00-0062	\$ 672,080
15	Strathmore Ct	1	4.0/2.2	•	With rotations, runs every third day - no further action planned	3/ 3/ 2020	255 25 55 5552	ψ 0.2,000
15	Strathmore Ct	3	6.6/5.4		With rotations, runs every third day - no further action planned			
15	Wheat Path	1	5.9/2.6		With rotations, runs every third day - no further action planned			
20	Gus Guerrera	1	ND/23.0	I/S	On outdoor GAC - Seasonal	7/27/2016	055-17-00-0016	\$ 182,842
20	Gus Guerrera	2	ND/2.2		Removed from GAC due to decrease in levels 11/2020	7/11/2017		7,- :-
20	Meetinghouse Rd	12A	47.0/150.0	I/S	On GAC	6/10/2016	055-17-00-0015	\$ 788,844
20	Meetinghouse Rd	14	27.0/220.0	I/S	Same as above	6/10/2016	055-18-00-0015	7 00,011
20	Meetinghouse Rd	17	150.0/1,510.0		Same as above	6/10/2016		
20	Meetinghouse Rd	19	96.0/440.0	I/S	Same as above	6/10/2016		
20	Meetinghouse Rd	22	ND/15	I/S	On GAC	7/27/2016	055-17-00-0013	\$ 29,528
	meeting ne doe na		112/23	., 0		7/30/2007	000 17 00 0010	φ 25,525
20	Old Country Rd	1A	5.9/26	I/S	Blended with #3 and #4 and throttled. Last blend was 2.1/6.3. Next round of GAC	6/10/2021		
	ora courtery rea		3.37 20	., 0	Section with the data in the content and are a section with a large real real content of the con	3/ 13/ 1311	055-19-00-0020.	
20	Old Country Rd	4	10/48	I/S	On outdoor GAC - Seasonal	6/26/2020	195-20-00-0053	\$ 802,282
23	Bridgehampton Rd	2A	3/36	1/5	On GAC	10/1/2019	133 20 00 0033	ÿ 002,202
23	Long Springs Rd	1A	9/8		On outdoor GAC - Seasonal	4/20/2020	055-19-00-0019	\$ 35,490
23	North Magee	3	2/13	O/S	on outdoor one ocasonal	7/20/2020	033 13 00 0013	33,430
23	West Prospect	1	7/20	1/S	Loaded carbon in existing empty vessel	3/18/2019		
23	West Prospect	2A	ND/2.8		Monitor, seasonal well, runs in last call for Fe (High of 5.4 in June 21)	3/10/2013		
23	Trest Hospect	2/1	140/2.0	1/3	The interior of the interior in the interior in the interior of the interior o		195-20-00-0055,	
32	County Rd 31	1	ND/22	I/S	On outdoor GAC - Seasonal	8/19/2020	195-20-00-0060	\$ 691,008

Total Funds Authorized to date for PFAS related work \$ 12,700,176

Total Funds Authorized to date for Emerging Containment Work \$ 23,634,691

1,4 Dioxane

MCL = 1.0 ppb

						_			
				_		Date Treatment			
			Recent levels	Current		I/S or Blend		Authorizat	
	Station	Well	НОР	Status	Action plan (Planning window = 4 months)	Started	Authorization(s)	Value to Da	ıte (\$)
1	Albany Ave	6	0.66	I/S	Blended w/ 4A - Last blend 0.26	8/23/2016			
1	Barton Ave	2A	2.05	O/S	Blended w/ any other well. Last blend was 0.78	2/19/2019			
1	Brook Ave	4	0.60	O/S	O/S for Mn				
1	Forty First St	6	0.80	I/S	Blended with Well #5 for operational control. Last blend was 0.26	8/23/2004			
1	Great Neck Rd	1	3.40	O/S	2 well blend was below 1.0. Blended	10/31/2016			
1	Harvest Ln	1A	1.80	I/S	Locked in Call-3. Last blend 0.83	10/31/2017			
					Lock in Call-2 to minimize run time. One of two well fields in Zone. Mini AOP pilot complete.		195-20-00-0068,		
5	Hollywood Pl	1	0.74	I/S	Blow-off basin modified, GAC Bldg addition complete.		195-21-00-0052	\$ 51	L8,835
5	Mill Lane	13A	0.69	I/S	With rotations, runs every third day. New carbon in April '21				
					Mini-AOP pilot complete; site work, piping has been relocated. Blended with Well #2 and #3.		195-20-00-0066,		
6	Broadway	1A	1.95	I/S	Last blend was 0.67		195-21-00-0053	\$ 20	00,023
					Mini-AOP pilot complete; site work, piping has been relocated; Well locked in lower call to		195-20-00-0066,		
6	Broadway	2	1.26	I/S	minimize run time. New carbon 06/06/21. Last GAC Eff was 0.05		195-21-00-0053	\$ 20	00,023
							195-20-00-0066,		
6	Broadway	3	0.72	I/S	Monitor; mini-AOP pilot complete; site work, piping has been relocated		195-21-00-0053	\$ 20	00,023
					Runs blended with two other wells, last on - first off. Mini AOP pilot complete; electric		195-20-00-0020,		
6	Flowerhill Rd	1	2.67	I/S	upgrade complete; GAC Bldg expansion - steel being installed. Carbon changed 06/10/21.		195-21-00-0051	\$ 16	8,625
				,,-					-,
					New carbon 09/20, Locked in Fire Call. 4/21 GAC EFF was Non detect. Mini AOP pilot		195-20-00-0020,		
6	Flowerhill Rd	2	2.59	I/S	complete; electric upgrade complete; GAC building expansion - steel installation in progress.		195-21-00-0051	\$ 16	8,625
				, -					,
					New carbon 10/20, Locked in Call-4; 4/21 GAC Eff was Non detect. Mini AOP pilot complete;		195-20-00-0020,		
6	Flowerhill Rd	3	1.73	I/S	electric upgrade complete; GAC building expansion - steel installation in progress.		195-21-00-0051	\$ 16	58,625
6	Jennings Rd	1	0.57	I/S	With rotations, runs every other day.				-,
6	Jennings Rd	3	0.72	I/S	With rotations, runs every other day				
				,,-					
6	Mayfair Dr	1	0.47	I/S	With rotations, runs every other day. *GAC Effluent sample. Mini AOP pilot complete				
	,		• • • • • • • • • • • • • • • • • • • •	,,-					
6	Mayfair Dr	2	0.89	I/S	With rotations, runs every other day. *GAC Effluent sample. Mini AOP pilot complete				
6	Woodchck Hllw	1A	1.00*	I/S	Blended with Wells #2 and #3. *GAC Eff sample. Last blend was 0.76	9/25/2020			
6	Woodchck Hllw	2	0.98	I/S	Blended inside Well #3. Was below 1/2 MCL in May 2021.	8/7/2021			
6	Woodchck Hllw	3	0.59	I/S	With rotations, runs every other day	0/1/2021			
-	W COderick Till W		0.55	1/3	Mini AOP pilot complete; GAC building expansion complete. GAC vessel painting and rehab		195-20-00-0070,		
7	McKay Rd	1	0.94	I/S	complete. GAC Eff sample 0.87		195-21-00-0055	\$ 46	55,219
9	Douglas Ave	1	4.02	1/5	Mini AOP pilot complete - 6/2/21 GAC eff 1.67. Carbon changed 06/30/21			7 70	3,213
9	Douglas Ave	2	2.29	1/5	Mini AOP pilot complete. Very GAC s for AOP delivered. Site work started				
	Douglas Ave		2.23	1/3	Blended - Mini AOP pilot complete; site work project authorized; new GAC vessels delivered.		195-21-00-0059,		
9	Middleville	1	1.09	I/S	Last blend was 0.92		195-21-00-0070	\$ 63	30,573
9	Middleville	2	0.87	1/5	Mini AOP pilot complete			-	59,693
i	IVIIGUICVIIIC		0.67	1/3	In the proceedings of the procedure of t	1	1-23-21-00-0033	د د با	2,033

						Date Treatment		
7one	Station	Well	Recent levels HOP	Current Status	Action plan (Planning window = 4 months)	I/S or Blend Started	Authorization(s)	Authorization(s) Value to Date (\$)
20110	Jean on	****		Status	Treation plant (Treating Williams 4 months)	Started	195-20-00-0065,	raide to Bate (4)
9	Sunken Meadow	1	1.11	I/S	Piping relocated - Mini AOP pilot complete. Last GAC Eff was 0.84		195-21-00-0056	\$ 234,602
							195-20-00-0065,	
9	Sunken Meadow	2	0.81	I/S	Monitor; piping relocated - Mini AOP pilot complete		195-21-00-0056	\$ 234,602
		_					195-20-00-0069,	
9	Waterside Rd	2	0.93	I/S	Mini AOP pilot complete; blow-off basin complete; GAC Bldg expansion complete.		195-21-00-0054	\$ 608,715
9	Wayne Ct	1	1.07*	I/S	Lock in Call-2. Mini AOP pilot complete; *GAC Effluent sample. Carbon changed on 06/08/21			
10	Church St NPT	1	0.91	I/S	Nitrate Blend w/ Washington - last blend 0.48; mini AOP pilot complete	7/25/2007		
10	Church St NPT	2	0.95	I/S	Nitrate Blend w/ Washington - last blend 0.55; mini AOP pilot complete	8/22/2007		
					Nitrate Blend w/ Washington - *GAC Effluent Sample; PSE&G service upgrade completed;			
10	Reservoir Ave	1A	0.78*	I/S	mini AOP pilot complete.	1/22/2016	195-21-00-0069	\$ 36,327
					Nitrate Blend w/ Washington - *GAC Effluent Sample; PSE&G service upgrade completed;			
10	Reservoir Ave	2	0.64*	I/S	mini AOP pilot complete.	5/25/2012	195-21-00-0069	\$ 36,327
10	Ruth Blvd	1	0.66	I/S	With rotations, runs every other day			
10	Ruth Blvd	3	0.61	I/S	With rotations, runs every other day - monitor Now piped to GAC	C /0 /0004		
10	South Spur	1	1.40	1/S	Blended with Well #3, last blend was 0.72	6/8/2021		
10	South Spur	2	1.38	O/S	Remain O/S - Try to blend if we need more supply Seasonal GAC - monitor			
10	South Spur	3	0.75	I/S	Seasonal GAC - Monitor		040-20-0009, 040-	
11	Carlson Ave	5	2.16	O/S	Remain O/S - Retire & replace w/ Old Dock Rd #2; drilling of Old Dock #2 completed		20-00-0010 040-20-0009, 040-	\$ 598,311
11	Carlson Ave	6	3.11	O/S	Remain O/S - Retire & replace w/ Old Dock Rd #2; drilling of Old Dock #2 completed		20-00-0010	\$ 598,311
11	Carlson Ave	7	0.82	I/S	Monitor - Piped and assigned to existing GAC 06/04/21 GAC Eff - 0.74		195-21-00-0074	\$ 27,414
11	Cornell Dr	2	0.80	I/S	Rotates Call-1, Call-2 daily, so only runs every other day			
11	Kings Park Rd	2A	0.53	I/S	Rotates Call-1, Call-2 daily, so only runs every other day			
11	Lawrence Rd	1A	0.90	I/S	With rotations, runs every other day - monitor			
11	Lawrence Rd	3	3.73	O/S	O/S pending AOP. New GACs for AOP delivered and piped.		195-21-00-0066	\$ 594,459
11	Lawrence Rd	4	1.27	I/S	Blended w/ Well #1A and #3 - Monitor - Last blend was 0.8. AOP mini-pilot complete	9/17/2020	195-21-00-0066	\$ 594,459
11	Old Dock Rd	1	0.54*	I/S	Locked in Call-2, Mini AOP Pilot complete, *GAC Eff sample	, , , , ,		, , , , , ,
11	Wicks Rd	1	0.69	ı/S	With rotations, runs every other day - monitor			
					Well failed and retired, have permit for Well #2A; drill in Fall '21. GAC piping relocated to			
12	Commercial Blvd	2	1.13	O/S	allow for building expansion		195-21-00-0060	\$ 45,583
12	Commercial Blvd	3	5.37	I/S	AOP completed - Station Treated sample is Negative	3/1/2018	055-14-00-0016	\$ 909,474
	Eastwood Blvd	2A	2.11	O/S	Leave O/S			
12	Eastwood Blvd	3	0.52	I/S	Monitor. On GAC. First time over 1/2 MCL 06/21			
					Lock in Call-2. Mini AOP Pilot complete, piping relocated; GAC building expansion foundation		195-20-00-0067,	
12	Falcon Dr	1	0.63	I/S	complete, steel being installed. GAC Vessels rebuilt.		195-21-00-0057	\$ 217,314
					Throttled to 500 gpm, Blended w/ #1. , Mini AOP Pilot complete, piping relocated, GAC		195-20-00-0067,	
12	Falcon Dr	2A	1.44	O/S	building expansion foundation complete, steel being installed		195-21-00-0057	\$ 217,314
					Blended with Well #1. Mini AOP pilot complete, piping relocated, GAC building expansion		195-20-00-0067,	
12	Falcon Dr	2B	1.53	O/S	foundation complete, steel being installed		195-21-00-0057	\$ 217,314
12	Lincoln	2	0.49	I/S	Monitor, throttled to 1,200 gpm and on GAC			
12	Oval Dr	4	0.57	I/S	Monitor, at or below 1/2 MCL			

						Date Treatment			
			Recent levels	Current		I/S or Blend		Aut	:horization(s)
Zone	Station	Well	НОР	Status	Action plan (Planning window = 4 months)	Started	Authorization(s)	Valu	ie to Date (\$)
12	Peconic St	1	2.60	O/S	Blended. Blend is still over 1.0 Leave O/S	8/15/2016			
12	Peconic St	2	0.89	I/S	Limited run time in winter				
12	Third Ave	3	0.72	I/S	Blended. Seasonal GAC. Last blend was 0.31. Mini AOP complete	4/1/2019			
12	Wheeler	6	0.91	I/S	On GAC. Blend with any other well. Last blend was 0.22	4/13/2021			
15	Boyle Rd N	1A	1.21	O/S	Leave O/S				
15	Boyle Rd PJ	1	0.55	I/S	Monitor				
15	Boyle Rd PJ	2	0.45	I/S	Nitrate Blend - monitor	7/31/2007			
15	Boyle Rd PJ	3	0.55	I/S	Nitrate Blend - monitor	7/31/2007			
15	College Rd	3	1.10	I/S	Blended w/ #4 - monitor - Last blend was 0.51	10/27/2016			
15	Daniel Webster	2A	0.50	I/S	Blended - monitor. Last blend was 0.13	8/23/2016			
15	Hawkins Rd	2	0.64	I/S	Rotates Call-1, Call-2 daily, so only runs every other day				
15	Horseblock Rd	1	0.78	I/S	Nitrate Blend - monitor. Last blend was 0.47	5/12/2013			
15	Jayne Blvd	1	0.47	I/S	Nitrate blend - monitor. Last blend was 0.28	6/21/2007			
15	Jayne Blvd	2A	1.02*	I/S	Blend with #5 and #1. Seasonal GAC. *GAC Effluent sample. Last blend 0.76	9/17/2020			
15	Jayne Blvd	3	0.86	I/S	Blended w/#4 - monitor - Last blend was 0.47	2/19/2019			
15	Kayron Dr	1A	0.48	I/S	Rotates Call-1, Call-2 daily, so only runs every other day				
15	N Washington	1	0.80	I/S	Short timeclock for winter				
15	Oxhead Rd	2A	0.76	I/S	Blended w/ #3 - monitor - Last blend was 0.60	8/25/2016			
26	Montauk St Blvd	1A	ND	I/S	Blended. Seasonal. Level tends to increase with pumping.	4/1/2016			
60	Gazza Blvd	2	3.62	O/S	Remain O/S. Additional supply to zone from Zone 12 now.				
60	Smith St Ef	1	22.30	O/S	AOP design approved 12/10/20, going out to bid soon; Mini AOP complete		190-19-00-0004	\$	1,249,309
	Various				Electrical Service Upgrades for AOP		195-20-00-0072	\$	562,630
	Various				Electrical Service Upgrades for AOP		195-21-00-0058	\$	851,784
	Various				Mini-AOP by-products pilot testing project		195-20-00-0051	\$	220,000
					Total Funds Authorized to date for 1.D related work			\$	10,934,515

Actions typed in RED have occurred in the past 30 days.

Wells highlighted in green are being treated to remove contaminant