AQUA POINT
ADVANCED WASTEWATER TREATMENT SYSTEMS & SERVICES

SAYBROOK STATION WWTP: OLD SAYBROOK, CT

Aesthetics & Footprint Main Project Drivers for Upscale WWTP on the Connecticut Shoreline

October 14, 2020

DESIGN CHARACTERISTICS

	Influent	Effluent
DESIGN FLOW (GPD)	41,850	41,850
DESIGN TEMP (C)	10	–
BOD5 (mg/l)	300	< 20
TSS (mg/l)	200	< 20
TKN (mg/l)	50	–
TOTAL-N (mg/l)	–	10
TOTAL – P (mg/l)	–	15

OVERVIEW

In 2015, developers needed a wastewater treatment solution for their state-of-the-art apartment complex in Old Saybrook, Connecticut. The developers of Post & Main, 186 garden style apartments spread over 10 acres on the Connecticut Shoreline, went above and beyond to give each apartment a luxurious feel – including private balconies, stainless steel appliances, accent lighting, & in-unit washer/dryers. Additionally, the development boasts a pool, lounge, fitness center, game rooms, and much more. So it stands to reason that when they looked for a way to treat the wastewater, they wanted to save money but more importantly make sure the footprint of the system was small enough not to infringe on the beauty of the apartment complex, all while treating the effluent to permit standards. Enter AquaPoint.

As is standard here at AquaPoint, we worked closely with the Consulting Engineers to design a system to specifically to meet the needs of the developer. Ultimately, we opted for one of our Bioclere-OH hybrid systems. This multi-stage, hybrid system integrates AquaCELL aerobic and anoxic MBBR chambers with two of our Bioclere trickling filters in between. The system was installed in 2016 and to date is consistently achieving effluent standards.

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PERFORMANCE DATA

Saybrook Station Performance Data
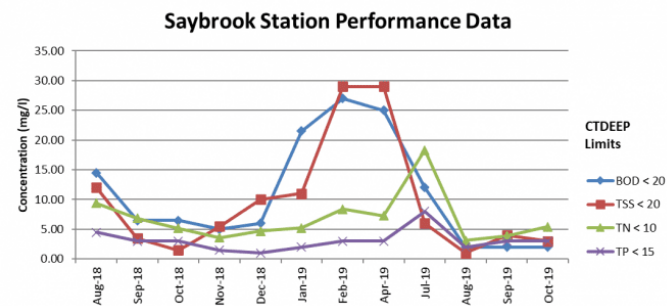
- System Commissioned: November 2016
- Detectable Limit for BOD & TSS: 2 & 1 mg/l respectively
- Data Source: Environmental Consulting Laboratories

DATE	BOD5 (mg/l)	TSS (mg/l)	TN (mg/l)	TP (mg/l)
AUG. 2018	14.50	12.00	9.37	4.50
SEP. 2018	6.50	3.50	6.84	3.00
OCT. 2018	6.50	1.50	5.15	3.00
NOV. 2018	5.00	5.50	3.60	1.50
DEC. 2018	6.00	10.00	4.69	1.00
JAN. 2019	21.50	11.00	5.22	2.00
FEB. 2019	27.00	29.00	8.37	3.00
APR. 2019	25.00	29.00	7.28	3.00
JUL. 2019	12.00	6.00	18.31	8.00
AUG. 2019	2.00	1.00	3.13	2.00
SEP. 2019	2.00	4.00	3.92	3.00
OCT. 2019	2.00	3.00	5.43	3.00
AVG.	10.83	9.63	6.78	3.08

SYSTEM DIAGRAM