

## CAMPHILL GHENT WASTEWATER TREATMENT PLANT

# Intermittent Stream Standards Community System for Ammonia Removal

September 27, 2016



## DESIGN CHARACTERISTICS

	Influent	Effluent
DESIGN FLOW (GPD)	8000	8000
DESIGN TEMP (C)	10	–
BOD5 (mg/l)	250	<10
TSS (mg/l)	250	<10
TKN (mg/l)	65	–
AMMONIA -N (mg/l)	50	<2
DISSOLVED O <sub>2</sub>	–	>7
FECAL (mpn/100ml)	–	<200

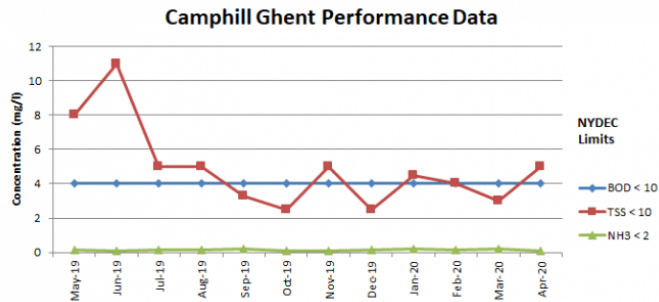
## OVERVIEW

Between the Berkshire Mountains in western Massachusetts and the Hudson River in eastern NY lies the small town of Chatham, NY. Scattered lakes, streams and conservation areas make this rural community an environmentally sensitive location.

When the Camphill Elderly Care Initiative developers decided to build a community on the outskirts of town in 2011 the New York Department of Environmental Conservation (NYDEC) required that a wastewater treatment facility be designed and installed to comply with the state's Intermittent Stream Standards. Under this permit requirement the wastewater must be treated to reduce BOD5, TSS and Ammonia-N to extremely low concentrations to protect the wildlife in the receiving stream.

The project engineer selected an AquaPoint Bioclere<sup>OH</sup> treatment system for its proven nitrification performance capability, energy efficiency and lowlife cycle costs. Effluent from the biological process is polished through dual pressure sand filters and parallel UV disinfection units prior to re-aeration and ultimately discharge to a stream.

## PERFORMANCE DATA



- System Commissioned: January 2012
- Detectable Limit for BOD & TSS: 4 & 5 mg/l respectively
- Data Source: New York DEC Records

DATE	BOD5 (mg/l)	TSS (mg/l)	NH3 (mg/l)
MAY 2019	4.00	8.00	0.12
JUN. 2019	4.00	11.00	0.09
JUL. 2019	4.00	5.00	0.14
AUG. 2019	4.00	5.00	0.13
SEP. 2019	4.00	3.30	0.18
OCT. 2019	4.00	2.50	0.11
NOV. 2019	4.00	5.00	0.09
DEC. 2019	4.00	2.50	0.15
JAN. 2020	4.00	4.50	0.19
FEB. 2020	4.00	4.00	0.15
MAR. 2020	4.00	3.00	0.20
APR. 2020	4.00	5.00	0.09
<b>AVG.</b>	<b>4.00</b>	<b>4.90</b>	<b>0.14</b>

## SYSTEM DIAGRAM

