

Chemical Manufacturing

Chemical manufacturers can produce some of the most challenging wastewaters – high in COD, organics, TDS, TSS, and oils. Haliant designed, manufactured, and installed a wastewater treatment system in 2008 to treat chemical wastewaters with very high COD and TDS in addition to concentrations of many organic solvents including toluene.

Haliant utilized a ceramic ultrafiltration membrane system to supplement the existing biological treatment system to form a membrane bioreactor (MBR) process. Ceramic membranes proved to be resistant to solvents in the wastewater and capable of producing high-quality filtrate.



Recycling of the UF concentrate increased biomass and improved the efficiency of the biological treatment

Treated Water Results	Raw Water	Treated Water
Turbidity	> 300 NTU	< 1 NTU
Total Suspended Solids (TSS)	15,000 mg/L	< 10 mg/L
Chemical Oxygen Demand (COD)	> 3,000	> 500 mg/L

