



METEOR®

Town of Groton, WPCF

Groton, CT

7.5 MGD MLE IFAS SYSTEM

INFILCO
BIOLOGICAL GROUP





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INFILCO
METEOR®
IFAS/MBBR PROCESS

QUICK FACTS:

- > **FLOW RATE:** 7.5 MGD Max
Month Flow; 15 MGD Peak
- > **PERMIT:** TN < 7 mg/l
- > **NUMBER OF UNITS:** 3
- > **START DATE:** October 2004

BACKGROUND

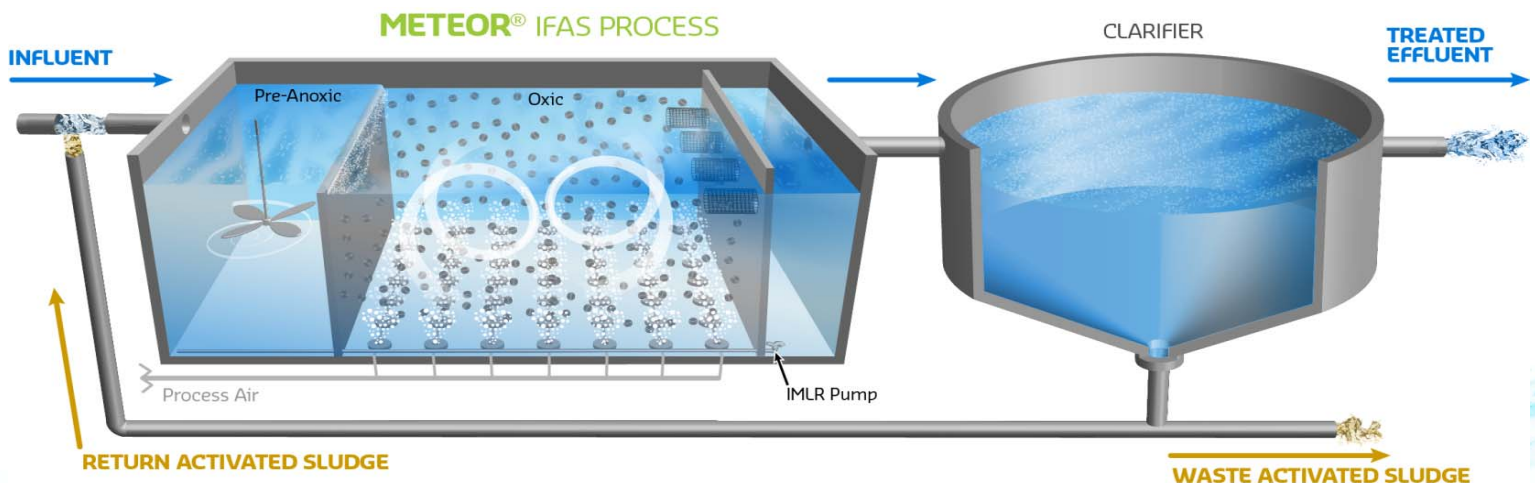
In 2003, as part of Long Island Sound Nutrient Load Reduction initiative, the Town of Groton, CT was asked to upgrade its facilities to increase its capacity and include the ability for Nutrient Removal to limit the discharge of Nitrogen and Phosphorus into the local water body. The plant currently rated for 5 MGD had to be upgraded to treat a flow of 7.5 MGD for effluent BOD and Total Nitrogen to < 30 mg/l and < 7 mg/l respectively. The plant had little real estate to work with which is why it chose the METEOR® IFAS retrofit. This allowed the increased capacity and treatment capability without the need to build additional aeration basins.

SOLUTION

The METEOR® IFAS Solution included retrofitting the three aeration basins in a Modified Ludzack Ettinger configuration. The system setup included an anoxic stage which preceded the aerobic zone and a portion of the nitrified effluent was returned to the pre-anoxic stage. This helped utilize some of the influent BOD as an electron donor for denitrification hence not only reducing the load on the aeration system but also avoiding the use of a carbon source which led to significant savings in Operational Costs. Further, because of the growth of the bacteria on the media, the WWTP which experiences significant spells of peak flows, maintained treatment throughout, as MLSS washouts did not impact it as they used to in the past.

PROCESS

Modified Ludzak-Ettinger (MLE) Configuration



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