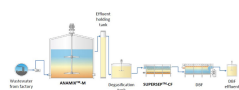


HP Hood facility reaps benefits from anaerobic digestion plant

The system removes 99% of organic waste material from high-strength dairy production wastewater.



January 19, 2018

One of the largest dairy production operations in the United States is achieving outstanding environmental performance from a Global Water & Energy FLOTAMET anaerobic digestion plant that removes pollution from wastewater and transforms it into green energy to fuel boilers. The FLOTAMET-M system, installed at HP Hood's Vernon, N.Y., plant is a key component of an integrated wastewater treatment line installed by Global Water & Energy that is achieving 99% removal of organic waste material from high-strength dairy production wastewater.

The wastewater treatment plant installed at HP Vernon replaced an older treatment plant to improve discharge qualities to local municipal treatment facilities, Global Water & Energy said, as well as to provide optimum treatment of high-strength waste from another HP Hood Plant in Oneida, N.Y. Removal of a large percentage of the wastewater's chemical oxygen demand (COD) load means wastewater effluent leaving the plant is of such high quality that it dramatically reduces the impact of the HP Hood facility on the town's small municipal treatment plant.

"And the technology is a double winner because not only does HP Hood's Vernon plant achieve some of the best COD removal levels achieved globally, but also the biogas produced (primarily methane) saves the plant money by replacing natural gas previously purchased to fuel the plant's boilers," said Ian Page, Global Water & Energy vice president. "As in most food and beverage plants, that fuel is an important part of production processes and a major expense."

The available footprint for construction of the new wastewater treatment facilities was also very restrictive. However, the system was able to fit in the available space and integrate well with the existing facilities, Global Water & Energy said, unlike other technologies HP Hood had investigated.

Global Water & Energy, a member of the Global Water Engineering (GWE) group of companies, has successfully built and commissioned more than 200 biogas utilization plants for clients worldwide over the past 15 years. Such plants produce green energy from pollution present in wastewater, using high-performance anaerobic bacteria to digest the dissolved and suspended organic matter, which is converted into biogas, a mixture of methane and carbon dioxide, the company stated.

HP Hood's Mt Vernon plant — with a capacity of 278,000 gallons per day of wastewater and 54,600 pounds per day COD — is one of the latest and most efficient GWE plants, featuring FLOTAMET technology that is particularly suitable for wastewaters rich in fat, oil and grease, as well as total suspended solids. Such technology is suitable for wide range of industries, including dairy production; meat, fish and food processing; biodiesel production; and for any other industry operation with a high-strength waste stream.

"The FLOTAMET system, for which no pre-treatment is required, offers reliable operation and superior removal efficiencies, leading to increased biogas production and improved effluent quality," Page said.

In the HP Vernon application, it has demonstrated these qualities in service for more than a year, the company said, achieving:

- >99% COD removal across the entire process (including anaerobic and aerobic polishing)
- >96% COD removal in the FLOTAMET system. GWE's ANAMIX reactor, the core process in the FLOTAMET system, achieves superior mixing of influent with anaerobic digestion biomass by means of a top-entry agitator that ensures that the influent is in constant contact with the biomass that consumes and converts waste material to biogas.
- Reliable handling of wastewater elements that may trouble conventional waste water technologies, including elements such as spoiled products (slops), as well as significant fats, oils and grease.

Produced under the market signature "Always Good, Always Hood," Lynnfield, Mass.-based HP Hood LLC is one of the largest and aseptic production and extended-shelf-life beverage processors in the United States, Global Water & Energy noted. Using state-of-the-art, ultra-high-temperature (refrigerated and aseptic) manufacturing, HP Hood produces a variety of branded, licensed, and private label products including fluid dairy, citrus, cultured foods, frozen desserts, extended-shelf-life dairy and non-dairy beverages.

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