

WASTEWATER TREATMENT SYSTEM FOR CHEESE FACTORY



Losurdo Foods, Inc., Heuvelton (St. Lawrence County), produces cheese and whey powder. Currently, Losurdo wastewater is treated at the village publicly owned treatment works (POTW), which is experiencing increasing difficulty in treating the Losurdo wastewater due to its nature and volume. This has led to significant cuts in production, costly regulatory fines and fees imposed upon Losurdo by the POTW. A Losurdo-sponsored study indicated that an anaerobic system would successfully treat and convert the organic portion of the facility's wastewater stream.

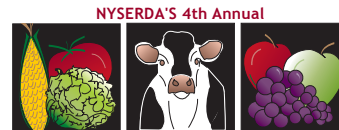
This New York State Energy Research and Development Authority (NYSERDA) project will provide cofunding to Losurdo Foods, Inc. to implement a wastewater treatment system developed by EMG International. This system will treat and convert the organic portion of the facility's wastewater stream, reduce the amount of organics discharged to the POTW, and use resulting biogas as an energy source. The system includes: wastewater pretreatment and conditioning, an Anaerobic Fluidized Bed Reactor (AFBR), and a final aerobic polishing step. The system will handle all of the process-related wastewater produced by the cheese and whey plants. The biogas will be used as an energy cogeneration/combined heat and power (CHP) fuel for a dedicated boiler, with the viability of a CHP plant to be investigated. The biogas produced is a clean-burning fuel, that can be used in production and heating processes at the facility. An estimated 25,000 to 39,000 cubic feet of methane gas will be produced daily, depending on plant production schedule. This technology has significant potential for replicability. Additional capacity, energy savings, and avoided costs at the POTW will be examined.



“The EMG Anaerobic Fluidized Bed Reactor (AFBR) system offers Losurdo Foods a reliable and affordable wastewater management option. It will enable us to expand production and lower costs, while maintaining our commitment to environmental responsibility”.

Michael Losurdo, Sr.
Losurdo Foods, Inc.

The system will remove 99.5% of the organics from the wastewater, allowing, by permit, discharge of the treated wastewater directly to the Oswegatchie River. This will facilitate continued viability of, and employment at, the Losurdo plant in Heuvelton. The direct discharge of cleaned wastewater into the river will avoid the local treatment plant and permit the POTW to support other industrial and residential growth in the community. Additionally, the POTW will save energy and experience reduced operating costs due to reduced



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