



## **Pennsylvania WWTP Fills Food Waste Recycling Demand**

January 7th, 2020

The Hermitage, Pennsylvania municipal wastewater treatment plant (WWTP) underwent a major upgrade in 2014, that included installation of a thermophilic anaerobic digester to produce a Class A biosolids. The facility also expanded its capacity to receive high strength organics, including liquid food waste, packaged consumer food waste, and fats, oils and grease (FOG). “We are a WWTP first and foremost, but food waste has a way of finding us,” notes Tom Darby, manager of the Hermitage Municipal Authority. “We are codigesting about 10,000 gallons/day of food waste, which is about 30% of our daily throughput. Over the last 5 years, revenues from tipping fees have averaged \$150,000 to \$200,000/year.”

Hermitage started out with an REM depackager, which it now uses to perforate plastic containers that have liquid in them. “We take 2 to 3 truckloads a week of milk, yogurt, sour cream, cottage cheese, etc.,” adds Darby. “There is a dairy 7 miles away and we knew it was hauling 2 truckloads/week of dairy waste to dispose in Michigan, as they drove past our door to get on the interstate.” To manage nonliquid, packaged food, the WWTP procured a Scott Turbo Separator. Most recently, it added a Veolia ECRUSOR that utilizes a screw press, resulting in less shattered plastic.

All food waste goes to a hydrolysis tank where it begins heating, and then to a prefeed sequencing tank to be thickened with sludge before being loaded into the thermophilic digester, followed by mesophilic digestion. Biogas is used to generate electricity; the plant’s monthly electric bill has been whittled down to \$5,000/month from \$25,000 to \$30,000/month. Producing Class A biosolids (10 tons/day) for land application also is saving the Hermitage WWTP money — it had been paying about \$8,000 to \$10,000/month to dispose Class B solids.