U.S. Department of Energy
WATER RESOURCE RECOVER PRIZE

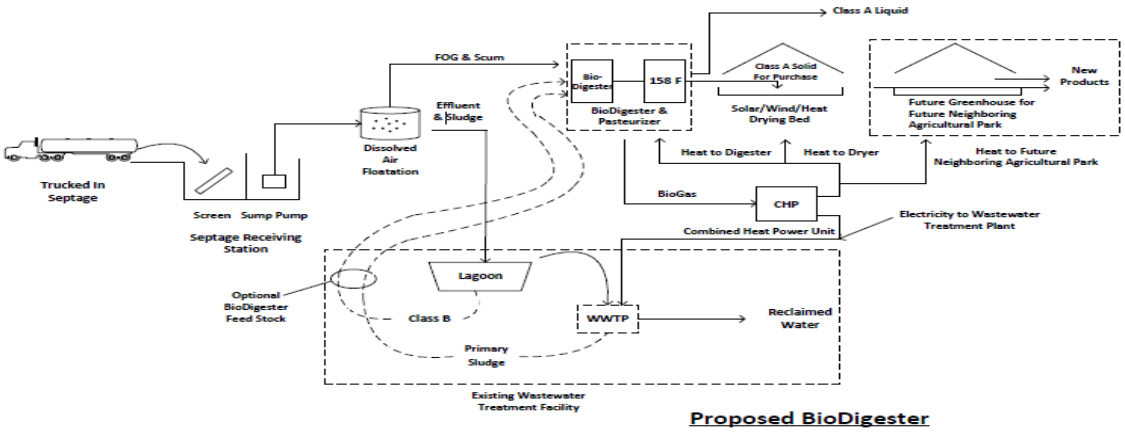
City of Tenino, Washington
Integrated Biodigester Resource Recovery Project

Summary Slide

The City of Tenino, Washington wastewater treatment (WWT) plant was built in 2009 and presently operates at ~40% capacity. Clean Class A processed water is reinjected to groundwater under the City's State Department of Ecology permit and sludge materials are stored in two settling ponds which are now full and from which solids materials are being pumped for disposal at considerable cost. The City aims to take septage from local area haulers to earn additional revenues and reduce its water/sewer rates to connected customers. The Project is a biodigester that will process septage, primary sludge and also food and agricultural wastes from local agri- and food businesses in the community. A new agri-industrial park is being built on a site adjacent to the WWT plant. With this Project, the City will:

- recover useful energy and nutrient resources from WWT plant biosolids;
- save on WWT plant electric and thermal energy costs;
- reduce biosolids loads to, and costs for disposal of biosolids materials from, holding ponds;
- enable septage receiving at the WWT plant, provide a transport efficient septage disposal location for area haulers and make remunerative use of underutilized WWT capacity; and
- co-process organic waste materials from local brewery, distillery, agricultural processing and food service operations thereby enhancing the local agricultural and food system economy.

While Tenino is a small town, less than 2000 population, it is progressive and actively pursuing its sustainable community economic development and resilience goals.



Proposed BioDigester & Co-Gen System