



# ALTOONA WATER AUTHORITY BIOSOLIDS PROJECT

ALTOONA, PA



**PROJECT SIZE**  
\$36M



**PROJECT SCHEDULE**  
9/3/2020-6/6/2023



**CONTRACT METHOD**  
ESPC



The Altoona Water Authority (AWA) faced rising biosolids disposal costs and was concerned with the long term viability of sending Class B biosolids to land application or landfill. Additionally, it was aware of other utilities importing liquid organic waste as a revenue source, and was interested in developing an organics receiving program. The AWA partnered with ESG to evaluate options and to develop a solution.

## SOLUTIONS

After thorough discussion and collaboration with the AWA administration, ESG developed a comprehensive plan that would exceed the AWA's technical and financial goals.

- Two one-million gallon anaerobic digester
- Digester control building
- High strength organic waste receiving station
- Re-purposing the existing two aerobic digesters into a mixed blend tank and digestate storage
- HVAC and lighting upgrades in buildings and pump stations
- Re-purpose existing tanks into dewatered centrate storage and into a trucked-in liquid biosolids storage
- Cake bunker for storage of dewatered biosolids and receiving of trucked-in biosolids cake
- Thermal biosolids dryer
- Dewatering centrifuge

Through this partnership ESG drove modifications to the facility that allowed for high strength organic waste to be trucked in and co-digested in the new anaerobic digestion complex. The resulting biogas from the anaerobic digestion process will be used to heat the new digesters as well as supply all of the thermal energy required for a biosolids dryer that will produce a 92% dry, Class A material.

## RESULTS

Through this project ESG has been able to provide a regional biosolids processing facility that reduces the cost of biosolids disposal for the participating utilities and provides a long term stable revenue stream for Altoona. The project has also allowed for beneficial reuse of biosolids by local farmers.