

A photograph of an industrial facility with large green cylindrical tanks, metal scaffolding, and pipes. The facility is housed in a large, open industrial building with a high ceiling and exposed steel beams.

INDUSTRIAL-SCALE
BIOSOLIDS
GASIFICATION
SERVING THE HOST
MUNICIPALITY AND
THE GREATER
PHILADELPHIA REGION

“We expect to see an immediate impact toward meeting our goals for resource recovery and renewable energy production without any cost increase to ratepayers.”

- John Warena, Executive Director, Morrisville Municipal Authority

CHALLENGES

The Morrisville Municipal Authority faced a problem experienced by wastewater utilities across the country: rising costs and shrinking outlets for the disposal of dewatered biosolids.

OUR SOLUTION

Ecoremedy® provides thermal drying of incoming sludge using only thermal energy recovered from the biosolids. Our process flexibility addresses changing regulations and markets through a wide range of products: dried Class A biosolids, EPA approved alternative fuel, activated Flexchar™, and concentrated nutrients. The Pilot facility demonstrates how we can improve environmental outcomes in our communities as we continue our mission to convert intractable wastes to renewable energy and value-added products.

SUMMARY

Within 12 months, Ecoremedy engineered, financed, permitted, and constructed the facility under an innovative BOOM (Build/Own/Operate/Maintain) model. During the pilot project, Ecoremedy successfully gasified biosolids cake generated at the MMA wastewater treatment plant into renewable thermal energy and produced two beneficial use products: US EPA approved alternative fuel and sterilized concentrated minerals with non-detectable levels of PFAS chemicals and other harmful contaminants. US EPA determined Ecoremedy's Fluid Lift™ gasification technology prevents the combustion of sewage sludge, a critical ruling confirming our technology is not sewage sludge incineration.

ECOREMEDY IMPACT

This Ecoremedy project has the annual capacity to convert 25,000 wet tons of municipal sludge to:

- 6.5 million Btus per hour of renewable thermal energy for drying, replacing 52,630 MCF of natural gas per year
- 17,650 tons of water evaporated with no fossil fuel
- 2,450 tons of dried Class A biosolids exported as renewable solid fuel