



MINIMIZES
ENVIRONMENTAL
IMPACT

REDUCES
CITY'S RISK

CUTS
TRANSPORTATION
COSTS

LOWERS
COMMUNITY
TRAFFIC

20,000

tons of biosolids Synagro manages
each year at the Baltimore Back
River PelletechSM Facility

CHALLENGE

In the 1980s, the biosolids management program for the Back River Wastewater Treatment Plant consisted of land application and lagoon storage of dewatered anaerobically digested biosolids. Composting was later added for diversification purposes. In 1989, mechanical problems encountered in the compost facility, coupled with a wet spring, resulted in the increase of stored, unprocessed biosolids and the number of odor complaints.

As a solution, the compost facility contractor sought to send dewatered biosolids to Louisiana for utilization on a farm. More than 5,000 tons of biosolids were loaded onto 61 railcars, but ultimately, only a portion of the biosolids were off-loaded in Louisiana. The train then unsuccessfully traveled the U.S. looking for an acceptable disposal site before returning to Baltimore, creating negative attention across the nation.

SOLUTION

A new facility now manages the biosolids by transforming anaerobically digested material into a usable fertilizer product. The Baltimore Back River Facility is an indirect vertical drying system that runs year round. The design allows for the facility to receive and process liquid and semi-liquid biosolids. Additionally, a state-of-the-art, five-stage air quality control process removes particulate matter and eliminates volatile organic compounds (VOCs) and odor components from the dryer.

At that time, indirect heat drying and pelletization was considered an emerging technology and was thought by some to be a risky option. Synagro's design, build, own, operate (DBO/O) proposal promised the processing of up to 110 dry tons of biosolids per day and the management of all disposal operations. Still in operation, The Back River Facility became home to the world's largest indirect dryer and paved the way for this technology to become widely adopted.

SUCCESS

As the owner and operator of the facility, the City eliminated the need for up-front capital and minimized its responsibility for managing the biosolids program. The City was ultimately able to reduce the number of trucks on the roads, further minimizing the facility's environmental footprint and costs associated with transport.

The innovation enables Baltimore to better manage its biosolids program and results in significant benefits to the City and its residents. The pelletized product is clean, odorless, easy to handle and store, and can be sold as a fertilizer or soil conditioner.



PARTNER WITH SYNAGRO

When you are looking for the best biosolids and residuals solutions to serve your business and your community, Synagro has the proven solutions to help you succeed. Municipalities and industrial organizations like yours that want to make the best use of organic waste turn to Synagro. Across the United States, Synagro applies expertise and innovative technology to provide resource recovery solutions that meet the unique needs of customers and communities.

WHO WE ARE

Synagro is the country's preeminent provider of biosolids and residuals solutions services since 1986.

Headquartered in Baltimore, Maryland, we employ over 800 people in 34 states and service more than 600 municipal and industrial water and wastewater facilities.

HOW WE CAN HELP

Our professional and experienced staff members provide solutions for all aspects of biosolids and residuals management needs, from land permitting and soil analysis by our nationwide technical services team to facilities development by our in-house engineering staff. Synagro provides a comprehensive scope of customer focused solutions.



CONTACT US

Synagro Technologies Inc.
435 Williams Court, Suite 100
Baltimore, Maryland 21220

800.370.0035
sales@synagro.com
synagro.com