

Biosolids Recycling Center

The Biosolids Recycling Center (BRC) produces Class A biosolids for farmland application across the Eastern seaboard.



A handful of Class A biosolid pellets (Photo: Synagro).

For decades, the Philadelphia Water Department (PWD) has been safely treating and processing biosolids, the residuals resulting from the wastewater treatment process, from our three water pollution control plants (WPCPs). Since 2012, biosolids have been thermally dried into environmentally beneficial, pathogen-free pellets used as organic fertilizer and renewable fuel. Prior to the thermal drying process, biosolids were composted, applied to farmland as fertilizer, or landfilled.

PWD produces more than 50,000 dry tons of biosolid pellets annually. The Class A pellets are produced through a thermal drying process which reduces the volume of biosolids by

removing moisture. The process is powered by both natural gas and biogas, which is a renewable fuel created from anaerobic digestion at the nearby Southwest WPCP. The biosolids thermal drying facility, managed through a 20-year contract with Synagro, began full operation in February 2012. Its operation promotes sustainable practices by recovering waste and reducing greenhouse gas emissions associated with trucking biosolids offsite.

In alignment with the City's Municipal Energy Master Plan, the Philadelphia Water Department developed a Utility-Wide Strategic Energy Plan, establishing energy conservation and greenhouse gas reduction objectives for the Department.

Important Facts

More about the Class A Biosolids Pellet Production Facility:

- ▶ **50,000+** dry tons of pellets produced annually
- ▶ **25%** of dryer train usage powered by digester gas
- ▶ **75%** of dryer train usage powered by natural gas
- ▶ **17,000,000 kWh** electricity used annually
- ▶ **20-year** Lease Agreement + **5-year** extension option



A look inside the dryer facility.

Co-Benefits of a Class A Pellet Production Facility

- ▶ **Fosters local business development** by using local contractors and installers
- ▶ **Reduces** landfill waste
- ▶ **Benefits** local farmers
- ▶ **Aids the City** in meeting Greenworks Philadelphia goals
- ▶ **Aids the City** in meeting Zero-Waste goals
- ▶ **Reduces greenhouse gas emissions** from truck traffic



The Philadelphia Renewable Bio-Fuels Facility, which began full operation in February 2012.