Energy Recovery

Wastewater solids are a renewable fuel with a heating value similar to wood or low-grade coal. Energy recovered from wastewater solids reduces purchased natural gas and/or electricity.

Process Heat
- The primary heat exchanger preheats air going into the incinerator.

Building Heat
- Waste heat boiler produces steam used to heat the plant during the winter months.

Electricity
- Waste heat boiler produces steam used to generate electricity during the summer months.

Cost Savings
- Energy used within the plant saves customers money.

Incineration
- Heating
- Powering
- Saving

Air Pollution Control
- Heating
- Powering
- Saving

Equivalent to:
- Heating 2,700 HOMES
- Heating 2,400 HOMES
- Powering 800 HOMES

$1.8M PER YEAR

Beneficial Use of Ash

The ash remaining after the incineration process is low in metals, high in phosphorus, and has valuable micronutrients. Metropolitan Council Environmental Services is actively exploring potential reuse of the ash as a fertilizer and concrete additive.

Metro Plant ash is 24% total and 14% available phosphorus.

The equivalent phosphorus and micronutrients in the ash would have an estimated value of $250/ton as a commercial fertilizer.

Greenhouse Gas Offset

The avoided greenhouse gas emissions from fossil fuel sources is 32,000 metric tons per year, as CO2.

That’s equivalent to taking 7,000 passenger cars off the road each year.