



Case Study: Garbage Waste Ash – London-Waste, EcoPark

IN BRIEF

The London Waste EcoPark is a 17ha site with a number of Centres used to reduce the amount of waste sent to landfill. The Energy Centre uses combustion to generate electricity from 500,000 tonnes of trade and domestic refuse per year on a continuous 24-hour operation.

London Waste purchased a total of twenty MultiAshflo conveying systems (four per ESP) with each system collecting the precipitator ash from purpose built hoppers and conveying it to the existing Flue Gas Ash storage silos. All of the MultiAshflo conveying systems are Teflon coated for addressing the corrosive and cohesive nature of the precipitator ash caused by the absorption of moisture during the combustion process.

MATERIAL CHARACTERISTICS

Material	Precipitator Ash from Garbage Incineration
Bulk Density	Aerated 400-900 kg/m ³
Size	63-125 Micron
Temperature	Up to 180°C (356°F)
Moisture	10%
Condition	Abrasive. Not Free Flowing

SYSTEM OBJECTIVES

1. Air consumption efficiency
2. Reliable consistent conveying
3. Maintain low pipe and valve wear
4. Replace existing cross-linked screw conveyors
5. Virtually maintenance free equipment



SYSTEM PERFORMANCE

Transfer Capacity: 2 Mt/h total
 Conveying Distance: 110m (360 ft.)
 Reception Points: Two
 Average Air Consumption:
 Total 12.0 Nm³/min (424scfm) for all twenty conveying systems

1. Maintenance was reduced to occur during scheduled boiler outages.
2. System operation is continuous 24 hours/day with consistent conveying.
3. Very low pipe and bend wear for handling an abrasive material.
4. Energy usages kept to a minimum.

