

TECHNOLOGY FUNCTIONAL FOR 400 TPD WTE MSW PROCESSING FACILITY-SOLAPUR



SUBMITTED BY



ORGANIC RECYCLING SYSTEMS PVT. LTD.

701 Lakhani Centrium, Plot No.27, Sec 15,
CBD Belapur-400614,
Navi Mumbai, Maharashtra
India
T: + 91 22 41702222
F: +91 22 41702200

TECHNOLOGY:

The anaerobic digestion of municipal solid waste is a process that has become a promising technology in waste management throughout the world. Biogas production from mixed municipal solid waste (MSW) was investigated under thermophilic dry anaerobic digestion operation (**DRYAD™ process**). Our technology has been validated by satisfactory results obtained from pilot plant running over more than one year and also results from existing 400 TPD MSW processing plant at Solapur Bio-energy System Pvt. Ltd, Solapur.

Our objective is to employ **DRYAD™** process as a sustainable technology for minimizing the organic fraction of municipal solid waste going to landfill, to provide the renewable source of energy as well as to reduce the potential greenhouse gases emission from landfill. The process established for **400 TPD MSW processing capacity** plant at Solapur Bio-energy System Pvt. Ltd, Solapur. Installed power generation capacity is **3 MW** and we are already going for additional 1 MW, and 60-70 TPD of good quality compost/soil enricher will also be produced at full capacity. The operation/process involved is Separation, Sizing, Homogenizing and Mixing to right consistency and temperature for feeding the **DRYAD™** digester.

This plant is successfully commissioned and in operation, thus generating power from produced biogas. However, process remnants mainly plastics, rubber etc. are observed in the range of 4-7 %. The electricity generated from the project is being **wheeled to the grid for off take by MSEDCL since July 2013 onward**. The compost generated from the plant is as per **FCO norms** and being sold to leading fertilizer companies. Recyclable materials are being sold to recycling agencies. The process remnants that are less in quantity and are not more than 15%, are being sent to Landfill.

Today, Solapur WTE plant is **country's first WTE** plant based on Biomethanation technology developed indigenously, and is successfully operational in the sector since last two year. The technology is also cost effective as compared to technologies from other European companies.