



ENLARGEMENT OF AN EXISTING COMPOSTING PLANT IN AGRIGENTO

The proposed plant layout has the main objective to develop a new and larger configuration of an existing composting plant for organic waste treatment and high-quality compost production. The project also provides the technology improvement for the process.

The enlargement of the existing plant consists in the construction of a new building in which the composting process will start inside no. 12 closed tunnels (process period 4 weeks).

After the intense composting phase, the material will be moved to the final maturation section (after screening operation). This phase will occur in dynamic windrows subjected to forced ventilation inside a closed concrete building. A further final maturation phase is also provided through static windrows, so that the composting process can be completed, obtaining a high-quality compost for sales.

The project provides an increase of the composting treatment capacity equal to 30.000 t/year, which increases, together with the existing authorized capacity 26.000 t/year (AIA authorization released by D.D.S. n. 1897 del 12/11/2014 for R3, R13 operation), the plant capacity up to 56.000 t/year.

DESIGN DATA

Private client GIGLIONE SERVIZI ECOLOGICI s.r.l.
Typology composting process in bio-tunnel and final maturation by air-forced and dynamic/static windrows.
Project cost € 11.528.753,90
Location Manica Lunga district – JOPPOLO GIANCAXIO (AG)
UTM Coord. (Zone 33S) 374,370 E - 4,135,751 N
Site area 72.000 m²
Existing plant surface 2.100 m²
New plant surface 17.138,31 m²
Task assigned and carried out Preliminary and Final design
Enlargement designing period March 2017

TECHNICAL DATA

Operations according to Encl. B and C referring to Part IV of Law Decree No. 152/06 (D.Lgs. 152/06) and further amendments D9, R3, R13.
New treatment capacity: 56.000 t/year
No. 1 building for composting tunnel: dimensions 38 x 90 m
No. 12 composting tunnels (ACT phase): dimensions 6 x 32 m each
No. 9 air-forced and dynamic windrows: dimensions 5 x 2.7 x 49 each
No. 3 static windrows: 1.600 m³ each
Average process period: 90 days

