



# IMPROVEMENT OF AN EXISTING AEROBIC BIOSTABILIZATION PLANT IN CATANIA

The proposed project comes from the need of the company Sicula Trasporti s.r.l. to increase the treatment capacity of the ever-growing amount of undersieve waste produced by mechanical selection of mixed waste. In particular, the enlargement of the existing plant consists of a new section of aerobic biostabilization of undersieve originated from mixed waste treatment plants.

In this section, the aerobic biostabilization will occur through dynamic windrows subjected to forced ventilation, inside two closed concrete sheds.

These sheds will be kept in aspiration with no. 3 hourly air changes; exhaust air will be conveniently treated.

The project provides an increase of the aerobic biostabilization treatment of non-hazardous waste amount equal to 150.000 t/year.

This new capacity, together with the existing authorized one which is 315.000 t/year, increases the plant capacity up to 465.000 t/year (operation D8 according to Encl. B and C referring to Part IV of Law Decree No. 152/06 (D.Lgs. 152/06) and further amendments.

## DESIGN DATA

### Private client

SICULA TRASPORTI s.r.l.

**Typology** aerobic biostabilization for air-forced and dynamic windrows.

**Project cost** € 14.789.776,01

**Location** Catania

**UTM Coord. (Zone 33S)** 505,850 E - 4,1387,495 N

**Site area** 113.000 m<sup>2</sup>

**Existing plant surface** 36.000 m<sup>2</sup>

**New plant surface** 34.500 m<sup>2</sup>

**Task assigned and carried out** final design, environmental impact preliminary assessment, integrated environmental Authorization application

**Existing plant construction period** April 2010 - August 2012

**Enlargement designing period**

December 2016

## 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 D8, R3**

**New treatment capacity:** 465.000 t/year

**No. 2 building:** dimensions 60.00 x 110.00 m and 70.00 x 110.00 m, net height of 8.00 m, both)

**No. 22 air-forced and dynamic windrows:** 600 m<sup>3</sup> each

**Average process period:** 21 days

**Air blowing system:** building A, no. 14 centrifugal fans 45 kW each; building B, no. 14 centrifugal fans 55 kW each.

