



LANDFILL FOR **NON-HAZARDOUS WASTE**

EXPANSION: CONSTRUCTION OF BASINS “D”, “E” AND “F” - LENTINI

This project is configured as a “substantial modification” of the waste disposal site authorised on 20/11/12 with D.D.G n 649 and subsequently modified on 31/01/2018 with D.D.G n. 37.

The already-authorized waste disposal body, located in the district of Grotte San Giorgio, in the territory of the Municipality of Lentini (SR), consists of three basins named A-B and C. Once the filling of the basins A-B has been completed, in accordance with the provisions of the first authorisation, by virtue of the second, the first phase is almost completed, which provides for the filling between the aforementioned basins and the relative reprofiling. In the meantime, the excavation and waterproofing works of the basin have been completed, and it has been tested and put into operation.

In order to guarantee temporal continuity to the contributions and to overcome the state of emergency that periodically recurs regarding waste management in Sicily, the client has initiated a request for substantial modification of the authorisation currently in place for the purpose of building three new basins (D, E and F), which will be built in a new area adjacent to the one currently used.

The new waste disposal site is designed to be able to contain a volume of waste equal to 4.551.050 m³ and shall be compartmentalised into 3 basins divided as follows:

- D1+D2 1.497.143 m³
- E 1.273.660 m³
- F 1.780.248 m³

A system for the collection, storage and treatment of leachate and a system for the collection and treatment of biogas are provided for.

The management of biogas is aimed at achieving the following objectives:

- Minimising odorous, annoying and potentially harmful emissions;
- Ensuring safety inside the waste disposal site and in the immediate vicinity;
- Where possible, allowing the recovery of a renewable energy source.

DESIGN DATA

Private client
Sicula Trasporti s.r.l.
Type of service Final design
Project cost € € 108.591.774,64
Location Lentini (SR)
Lot area 262.597 m²
Surface basins 162.231 m²
Total volume that can be landfilled 4.551.050 m³
Design period 2019

TECHNICAL DATA

TREATMENT:
Expected conferrals: 700.000 - 900.000 t/year
Expected operational life of the landfill: 6 year
Conferral days per year: 320
Maximum expected leachate production: 50 m³/day
Anticipated theoretical max biogas production: 10÷30 Nm³/t
Rejection by year

ACCESSORY INSTALLATIONS

- Leachate treatment system;
- Biogas treatment;
- Suction and cogeneration system for the production of electricity.

