



Country

France

Client

Communauté Urbaine
de Marseille - Provence -
Métropole

Date

2000 - 2005

Cost of works

€10 million

Sogreah's services

Complete supervision and
coordination of dump
rehabilitation

- ▶ Earthworks and roads
- ▶ Biogas management
- ▶ Stormwater management
- ▶ Landscaping
- ▶ Irrigation and fire-fighting
networks

Background

An official order issued in October 1999 calls for the rehabilitation of the dump between 2001 and 2006 (including 48 ha to be completed by the end of 2002), and closure of the biological treatment centre for urban residues on 30 June 2002.

During the first phase of rehabilitation, work will be in progress while the dump is still in operation, and special access and zoning arrangements must therefore be made.

Characteristics

Area concerned: 80 ha

Earthworks

- Slope cover (downwards):
 - 50 cm layer of amended sandy silt to encourage plant growth.

- Geosynthetic drainage system to remove infiltrating water.

- 50 cm layer of fine material of less than 10-6 m/s permeability.

- Dome cover:
 - 1.00 m layer of semi-impermeable material.
- Creation of a siding for rail transport.
- Jacking below the siding.
- Anti-dispersion nets.

Biogas

Captured in pits, conveyed via HDPE pipes and burnt (two flares). The design principles allow for possible future recycling.

Stormwater

Runoff water recovered in collection ditches and conveyed outside the site.

Landscaping

- In the long term, the dump is intended to return to its natural state, exposed to the weather.
- Various species of tree and shrub were planted.

Irrigation and fire-fighting network

- Installation of a network of hydrants as part of a fire-fighting programme.
- Watering from the hydrants using mobile equipment, to enable grass to become quickly established.