

# Sludge Land Fill/ Composting Facilities at Site 9N

## Client

Alexandria General Organization for Sanitary Drainage (AGOSD)

## Scope of Work

Project management  
Geotechnical investigation  
Ground water monitoring survey  
Concept design  
Schematic design  
Detailed design  
Tender documents  
Tender action  
Construction management  
Construction supervision

## Location

Alexandria, Egypt

## Types of Activities

Architectural  
Civil works  
Communication & Security Systems  
Electrical  
HVAC  
Mechanical  
Structural

The project is a part of Alexandria Wastewater Program (Phase I) which was completed in 1995. Over an area of 75 hectares, the project's site (9N) is located at 35 km west of Alexandria. The project site receives sludge cake from the Mechanical Dewatering Facility (MDF); and receives grit, scum, and screening from the East Treatment Plant (ETP) and the West Treatment Plant (WTP).

Grit, sand and screening material generated from ETP and WTP are transported to site 9N by dump trucks. According to 2009/2008 statistics, the total quantities transported to site 9N are 8,312 m<sup>3</sup> / year of sludge; 7,973 m<sup>3</sup> / year of sand; 1,749 m<sup>3</sup> / year of screening material; and 5 3,338.8 m<sup>3</sup> / year of industrial solid waste.

Site 9N has been initially developed as a dedicated disposal area for the sludge and land spreading area for

dewatered sludge. The sludge is now being composted using tuned withdraw techniques.

The site includes six lined trenches (200 m long each) for receiving scum & screening material where the material is placed in layers; every layer is covered with clean sand. The site also includes lined evaporation pond to receive the leached water from the trenches in addition to service facilities comprising maintenance buildings, stores, garage, administration building and laboratory.

The site is served with a lot of heavy equipment such as spreading vehicles, 300 HP trenchers, loaders, composters, dozers and water wagon.

