

## Waste treatment projects

# Design – Construction – Maintenance – Operation of the Infrastructures for the Integrated Solid Waste Management System (ISWMS) of the Region of West Macedonia- PPP project

Greece

### Project

Detailed Geotechnical Design for the construction of the new units of the ISWMS & Detailed Geotechnical Design for the construction of the new units of the ISWMS & Geotechnical assessment and tender design for the construction of a waste treatment plant and it's waste landfill area, at Western Greece (PPP project).

### Construction Budget

Total cost: approx. € 100m.

### Project Schedule

Design: 2012 - 2016

Construction: 2013 - 2017

### Project Description

Detailed Geotechnical Design for the construction of the new units of the ISWMS & Geotechnical assessment and tender design of the various structural units and facilities of a waste treatment plant, a waste landfill area and a waste transfer station at Western Greece

### Geology

Neogene marls and lignites, waste deposits from lignite open pit mines, ash deposits from lignite combustion, alluvial sediments (clays and sands)

### Our Services

Detailed Geotechnical Designs:

- Geotechnical assessment of the available geotechnical designs & surveys
- Geotechnical profiles determination and design parameters
- Subsoil improvement with the use of the pre-loading method coupled with the application of vertical drains
- Geotechnical design and slope stability analyses of the deposition basin and the waste tailings slopes
- Design of liner system – stability and integrity calculations
- Foundation parameters' determination for buildings and facilities
- Monitoring program determination for the subsoil improvement

Tender Designs:

- Geological /Geotechnical Interpretation Report – design parameters selection
- Subsoil improvement preliminary proposal
- General geotechnical design and slope stability analyses of the deposition basin ( 9Ha) and the waste tailings slopes
- Geotechnical stability and integrity calculations of the liner system
- General determination of the foundation parameters for the facilities
- Geotechnical investigations program



Proposed geotechnical investigations program layout

### Client

Joint Partnership "AKTOR CONCESSIONS S.A. – HELEKTOR S.A."