

Detailed Design and Tender Document for the Remediation of a Chemical Landfill

Project Details

Belgium, remediation of a chemical plant and landfill for hazardous waste

Client:

Confidential

Project Budget:

Confidential

Key Staff:

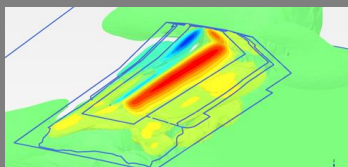
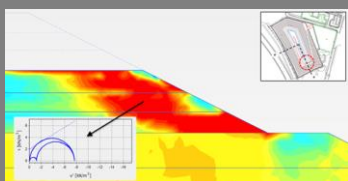
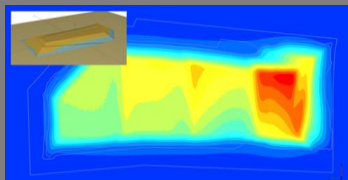
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Duration:

2012-2013

Provided services

- Geotechnical Investigation
- Engineering Analysis
- Detailed Design
- Tender Document



Introduction

The Client is a Multinational Engineering Company, involved in the remediation of a Chemical Plant in Belgium. The Client asked the expertise of Pollux Consulting in design and Stability Assessment of an existing landfill, to be reprofiled, operated and capped.

Global description

The remediation involved the reprofiling of an existing landfill and the disposal in the landfill of all the excavated material from the site remediation. Due to a lack of space, the slopes of the landfill had to be profiled in 8/4. Pollux Consulting performed the engineering analysis in order to optimise the stability of the waste body and to optimise the capping.

Based on the results of the engineering analysis, Pollux Consulting drafted the Tender Documents.

The tendering procedure is ongoing.

Delivered Services

Pollux Consulting delivered the following services:

Engineering analysis:

- Geotechnical investigation of the waste and remediation materials.
- 3D buildup of the landfill body (Rhino 3D).
- Stability assessment of the landfill body (Slide, Plaxis 2D, Plaxis 3D).
- Stability assessment of the capping material (Plaxis 2D, Plaxis 3D).
- Material selection and optimization of the capping.
- Water balance (Visual Help).

Detailed Design

Pollux Consulting delivered the detailed design of the remediation of the chemical plant, including:

- The excavation/backfilling operations in the vicinity of gas pipes, chemical tanks and railroads.
- The water management during the remediation works.
- The profiling and compaction procedures during the filling of the landfill.
- The installation and control procedures of the set of liners and soil material of the capping.
- The detailed drawings.
- The cost estimates at detailed design stage.

Tender Document

Pollux Consulting drafted the tender documents of the remediation works, including profiling, filling and capping of the landfill. Pollux Consulting drafted the Bill of Quantity.

