

Thermopile

T-05-01 / BELLIARD

IN-SITU THERMAL TREATMENT OF SOIL CONTAMINATED BY MINERAL OIL IN AN UNDERGROUND PARKING (-1) BY THERMOPILE IN-SITU.

Context

The owner of this centrally located office building wanted to sell his property. However, because of a previous and leakage in 2 underground storage tanks and consequent soil and groundwater pollution, the transaction could not take place. The buyer did not want to take over any risks associated with the pollution.

In order for the transaction to happen, it was critical to definitively eliminate all pollution and so erase the site from the contaminated land register.

Project Description

Haemers technologies has been chosen to treat the site In-situ (no excavations) since it was the only technology offering a guaranteed result (i.e. clean soil) within a guaranteed timeframe (a couple of weeks).



Treatment/Clean Up Targets

Mineral oil contamination (average 12.500 ppm – peaks at 63.000 ppm). The polluted zone was very difficult to access (limited height at 1.8 m – underground parking) and very deep (16 m deep with groundwater at 14 m).

- Targets: 800 ppm
- Duration: 30 days of treatment

Results

In 4 weeks of treatment, the results obtained are largely beyond targets: Mineral oil concentrations:

- At 3 m depth: non detect
- At 6 m depth: non detect
- At 16 m depth: 36 ppm (target: 800 ppm)

Conclusions

- Clean-up goals achieved and beyond
- Site no longer in contaminated sites register
- Real estate transaction has taken place
- Buyer fully protected (clean soil)
- Execution within agreed timing

This project was designed and executed by the current Haemers technologies team, when they worked within the legal entity L&C SA (formerly Deep Green SA), which belongs to the Haemers technologies group.

Key facts

Contaminants

TPH

Max. Concentration

63000

Volume

1450

Tonnage

2600

Number of Heating Tubes

Temperature Target

Heating duration

Treatment Targets

<300

