

ISTD/ I-16-02 DONG

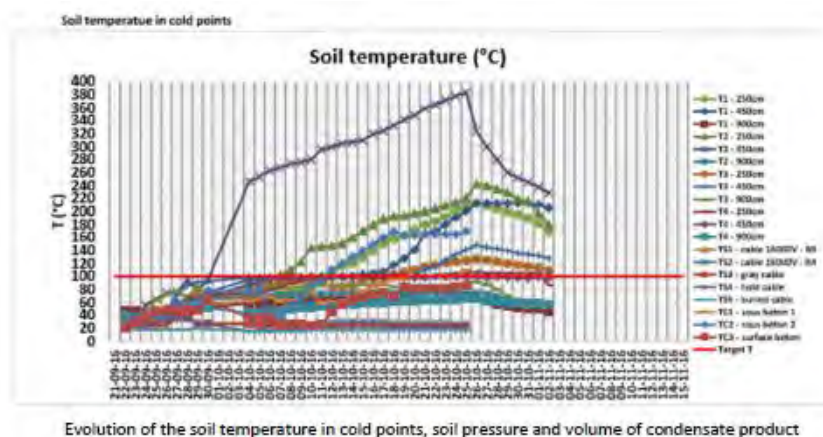
Context

The project took place in Denmark, in the city of Allerød. The site is located in an industrial area, on the grounds of a power station (DONG Energie), under a high voltage transformer. Peak concentrations of chlorinated solvents reached up to 0.38 mg / kg dm, on an area of 36 m² with a volume of 288 m³. Oil was also detected, with a concentration level up to 15.000mg / kg.

The burners were powered by propane. The work was done under a high voltage transformer. To protect the electrical installations, a pit 6x6m by 1m deep was dug. 15 heating tubes (length: 8.8 to 9.2m bgl) and 24 steam tubes connected to an EVS system were placed there, up to 9.4m deep. The non-condensable gases were burned to meet the discharge standards, while the condensable ones were collected in a tank for processing at the GEO facility.



Monitoring



Analysis Results

Analysis of gases before the heat exchanger and that of the condensate collected after two weeks of treatment showed that it was almost complete and no VOCV residues were detected in the soil. Non-chlorinated hydrocarbons were also present in the soil but not listed as treatment targets. The objective of clean-up of chlorinated solvents has therefore been achieved.

- Mobilization: 3 weeks
- Treatment: 6 weeks
- Demobilization: 2 weeks

Key words

Contaminants
PCE / TCE , DNAPL , LNAPL

Max. concentration
0.38 mg / kg = DNAPL, LNAPL
15.000mg / kg = PCE/TCE

Volume
288

Tonnage
524

Nb of heating tubes
15

Temperature Target
88°C

Heating duration
42

Treatment targets
<0.1mg/kg = DNAPL, LNAPL

Location
Allerød - Denmark

Future Use
Industrial

Client
Arkil

Partner
Arkil

Consultant
GEO A/S

Date
2016