ESTD/ E-19-01
NOROXO (FR)

Context & Project Description

The whole Noroxo site covered about 34 hectares. It was located between a commercial area and an agricultural area. In order to build the stockpiles (ESTD), 7.566 m² located at the extreme North West of the site were allocated for the thermal treatment.

The main issue with high concentrated spots on a large area is the difficulty to treat all the spots onsite, and therefore an Ex-Situ Thermal Desorption (ESTD) was selected by the client. Soils with hydrocarbons concentrations higher than the remediation target were excavated and stored in a single location and eventually erected in several polluted soil piles. The treatment area was chosen to be able to run 2 piles simultaneously, with a third one in mobilization/demobilization.

Conclusion

The project was achieved after 9 months of treatment. All the improvements applied from Pile 3 and the weather led to a decrease of the treatment time from 53 days to 39 days. Each batch was accepted and validated by the client which means than HT remediated about 12.000 m3 of polluted soil.

Emission standards were respected throughout the treatment. The demobilization was achieved in 1,5 months and almost all the equipments were brought back to Brussels to be reused in future projects.

Key words

Contaminants
C5-C40, BTEX,HAP

Max. concentration
C5-C40: 4145.5 mg/kg DM
BTEX: 1.16 mg/kg DM
HAP: 30.3 mg/kg DM

Volume
2000 m³

Tonnage
3800 Tons

Nb of heating tubes
75

Temperature Target
150-200°C

Project duration
39-52 days

Treatment targets
C5-C40: <2000 mg/kg (silt)
<1000 mg/kg (backfill)

BTEX: <1.5 mg/kg (benzene)
<5 mg/kg (toluene)
<10 mg/kg (ethylbenzene)
<40 mg/kg (xylene)

HAP: <50 mg/kg

Location
Harnes, France

Future Use
Commercial and Leisure

Client
Exxon

Partner
Seché EcoService

Consultant
Golder Associates

Date
2019