

Rotary Kiln

R-00-02 / OSTRAVA

Context

Thermal desorption of 450,000 tons of tar contaminated soil by means of thermal desorption. The clean-up site is known as 'Karolina' and is located downtown Ostrava. It was a former gaswork site, part of a major steel factory. The clean-up project was funded by the Czech National Property Fund. Excavation and pre-treatment took place on the 'Karolina' location, and contaminated soil to be treated thermally was transported to a specific location, approx. 2km from Karolina, where the thermal unit was set-up.

Project Description

The soil to treat is highly contaminated with PAH, has a high clay content, and has some levels of Hg pollution. Other heavy metals are also found in the soil. The clean-up levels are 100 ppm for the PAH and are variable for the heavy metals. Deep Green, together with ASG were involved in the project for the design of the thermal desorption unit, the procurement, building, set-up and start-up of the project. Deep Green was in charge of technical project management during the first twelve months of operations, and took care of the training of local staff, as well as the set-up of all environmental, health and safety procedures for the operations of the thermal unit.

Equipment

The project is done by means of a specially designed thermal desorption unit, with a nominal capacity of 35 t/h, equipped with a full scale ceramic filter, as well as a wet scrubber. Stack tests were successfully performed on the unit. The unit is equipped with continuous emissions monitoring.



Key facts

Contaminants

PAH

Max. Concentration

15000

Volume

281250

Tonnage

450000

Number of Heating Tubes

Temperature Target

Heating duration

Treatment Targets

<100

Location

Industrial

Future Use

Client

Consultant

