

Rotary Kiln

R-98-01 / HOUSTON

THERMAL DESORPTION OF TPH CONTAMINATED SOIL
FOR CONOCO PHILLIPS - HOUSTON – (TX -USA)

Context

Low Temperature Thermal Desorption of TPH contaminated soil from various gas stations at a fixed facility in Baltimore (MD) and Adelanto (CA).

CONOCO PHILLIPS owns and operates a large quantity of gas stations in the United States. In accordance with their general environmental policies, as well as State regulations, those gas stations need to be cleaned-up and put in accordance with current legislation. Therefore, CONOCO PHILLIPS has remediated their gas stations, where the TPH contaminated soil was sent for thermal treatment to the Baltimore (MD) and Adelanto (CA) facilities, owned and operated by Deep Green / Haemers technologies.

Equipment

Contaminated soils were processed by a counter flow, direct fired LTDU (Low Temperature Desorption Unit) with nominal capacity of 70 tons (US) per hour in Adelanto and 80 tons (US) per hour in Baltimore. The equipment train included a pre-screener, belt scale conveyor, rotary dryer, fabric filter baghouse, thermal oxidizer, soil moisturizer, and radial stacker. Natural Gas was used as process fuel in Baltimore, and an additional triple heat-exchanger in Adelanto.

Treatment/Clean Up Targets

The soil to be treated contained TPH concentrations up to 15,000 ppm. All soils were cleaned down to a-less than 50 ppm TPH. Air emissions were in accordance with the local air permit conditions (air permit is available on www.deep-green.com in the permit section).



Key facts

Contaminants
TPH

Max. Concentration
15000

Volume
6250

Tonnage
10000

Number of Heating Tubes

Temperature Target

Heating duration

Treatment Targets
<50

Location

Future Use

Client

Partner

Consultant

