



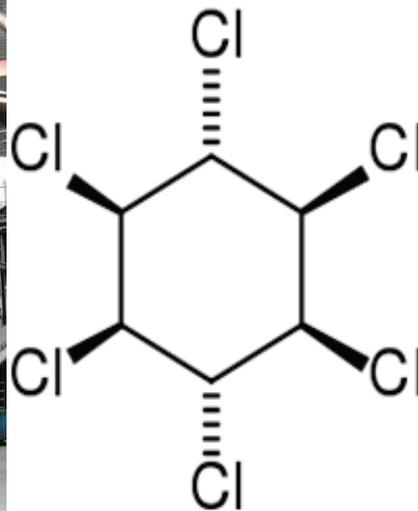
Thermal treatment of soil contaminated with HCH

Project details

Region:	Germany
Client:	Chemical Industry
Involved parties:	ARE Deutzen GmbH /Treatment facilities Deutzen
Time period:	October 2009 to March 2010
Project value:	Confidential

Completed work

- Taking delivery of HCH contaminated soil
- Secure transportation of the soil
- Thermal treatment at the Deutzen facility
- Disposal of the treated soil



A chemical company has been using a site in Germany for the production of chemicals since 1949. Between 1954 and 1972, this also included Lindane.

During production, different Hexachlorocyclohexane (HCH) isomers accumulated, of which only γ -HCH was sold due to its insecticidal effects. Everything else (mainly α -HCH, β -HCH und z. T. δ -HCH isomers) was originally stored and used as construction material around the plant to raise the surface level in marked-off areas.

In the following years, construction work meant that it was irregularly redistributed around the surrounding soil.



Recent eco-toxicological and toxicological testing determined that these chemicals are not suitable for use as building materials. Due to this, the above-mentioned materials had to be remediated and replaced in one section of the plant.

More than 10,000 tonnes of soil contaminated with HCH with a contaminant level of up to 10 000 mg/kg HCH (measured as EOX) and a Chlorine content of up to 1% were transported to the ARE Deutzen GmbH facilities to be treated thermally.

HCH has a very strong, unpleasant smell, and so odour emissions and the formation of dust was minimised by temporarily storing the material in special halls fitted with air extraction systems.

Treating the soil using thermal desorption meant that it could be reused as building material for construction work at waste disposal sites.