

# Alternative approach for former DOW sandblasting site

## Delfzijl



DOW produces raw materials for the polyurethane industry in Delfzijl. The soil at the site of the sandblasting area was polluted with monochlorobenzene (MCB). The DOW plant in Delfzijl was obliged to submit the principles for a soil remediation plan to the Provincial Government of Groningen under the framework of the BSB-project (Soil Remediation of Industrial Sites). The States Deputed agreed with this plan and DOW started a long-term project to improve the provisions to protect the soil.

DOW and its consultant chose for an alternative, innovative approach that was proposed and developed by In-Situ Technieken. In Situ Chemical Oxidation (ISCO) is the technique that was applied using sodium persulphate and catalysts as the reagent. Strict safety requirements applied at the DOW site because the work took place at a chemical plant. A permit was required every day before work could be carried out. For instance, before commencing work everybody surveyed the site to note any risks and to deal with these immediately and there were meetings about the progress of the remediation.

### Result

The remediation was carried out quickly, safely and within budget, fully in accordance with the requirements and the expectations of the client, and resulted in DOW achieving a negligible soil risk in accordance with the Netherlands Directive for Soil Protection (NRB). The site will be monitored for a year. If necessary further action will be undertaken.

In-Situ Technieken has state-of-the-art knowledge of innovative remediation techniques at its disposal for treating contaminated soils and groundwater. Many of these techniques have been developed within the company itself and have been patented. We use an own laboratory and a large library and work closely with the scientific world in order to continually improve our innovative techniques. We can almost always offer you a suitable solution for any contamination. In-Situ Technieken - a trade name of ARCADIS - is fully certified for carrying out soil remediation projects and is active worldwide.

### In-Situ Technieken

Het Rietveld 59a, 7321 CT Apeldoorn  
P.O. Box 673, 7300 AR Apeldoorn  
The Netherlands

Phone +31 (0)55 5815 915

Fax +31 (0)55 5815 599

Email [info@insitu.nl](mailto:info@insitu.nl)

Website [www.insitu.nl](http://www.insitu.nl)

