

CENSUS®

A well-known example for the stimulation of natural self-cleaning ability is the In-situ remediation of CHC contaminations. Despite a qualified implementation of the remediation measures the accumulation of metabolites (c-DCE and VC) may occur. In the context of NA or ENA measures, the process of anaerobic reductive dechlorination plays an essential role. Several studies demonstrate a direct correlation of the complete dechlorination of CHC with the presence of certain enzymes. All enzymes for the complete degradation of VC or TCE and c-DCE via VC to ethene occur in bacteria of the Dehalococcoides group.

We offer the quantification of bacteria of the Dehalococcoides group and the key genes relevant for reductive dechlorination worldwide together with our partner Microbial Insights under the product name CENSUS®.

Depending on the prevailing environment, microbial dechlorination can also be caused by other microorganisms. For example, methanotrophic microorganisms are able to cometabolize chlorinated hydrocarbons such as TCE very effectively under aerobic conditions. Also known is the aerobic utilization of vinyl chloride as a substrate by ethenotrophic microorganisms under aerobic conditions. We offer the quantification of single organisms or genes under the product name CENSUS®.

