

Case study – Belgium

***In Situ* Chemical Oxidation using NaMnO₄ and anaerobic bioremediation using CAP18™ and CAP18-ME™: A Full Scale CAPISCO™-design**

- **Former dry cleaning.**
- **Geology :** very fine to fine sand.
- **Groundwater pollution of :**
 - Tetrachloroethene (PCE);
 - Trichloroethene (TCE);
 - Cis-1,2-dichloroethene (CIS);
 - Vinyl Chloride (VC).
- **Maximum concentrations :**
 - PCE : 49.100 µg/l;
 - TCE : 8.850 µg/l;
 - CIS : 69.000 µg/l;
 - VC : 2.060 µg/l.
- **Injection method :** direct push.
- **Bench test and pilot were positive.**



- **Full scale :**
 - NaMnO₄ :
 - Injection in August 2007;
 - 6.720 kg NaMnO₄ 40%;
 - 44 injectors.
 - CAP18™ :
 - Injection in September 2007;
 - 5.520 kg of CAP18™;
 - 152 injectors.
 - CAP18-ME™ :
 - Injection planned in December 2007;
 - 10.170 kg of CAP18-ME™;
 - 254 injectors.
- **Monitoring :** foreseen till 2012.