

Short Course in conjunction with



DNAPL Remediation Decision-Making Tools

by Grant Carey and Dr. Edward McBean

September 21st (the day before ConSoil 2010)
13.00 – 17.00 hrs
Salzburg Conference Centre

Deciding how much effort to commit to DNAPL source treatment is challenging because of uncertainty in the prediction of remediation timeframe and efficiency. This course will describe methods and analytical tools for quantifying cost, benefits, and risk reduction associated with DNAPL remediation. Methods presented in this course include quantification of: remedial goals for source strength reduction; source mass depletion required to achieve remedial goals; remediation timeframe estimates; prediction of the source strength reduction expected for various in situ technologies; and lifecycle costs and sustainability metrics.

After this seminar, participants will be able to:

- List site features to be characterized when conducting a DNAPL remediation cost-risk-benefit analysis;
- Describe how the ganglia-to-pool ratio (GTP), source age, heterogeneity, and back diffusion may

influence remedial efficiency and remediation timeframe;

- Calculate the remedial action objective for source strength reduction at a site, and estimate the range of source mass depletion required to accomplish this goal;
- Use the NAPL dissolution model provided with course exercises to predict the remediation timeframe for natural gradient dissolution and active remediation for specific technologies; and
- evaluate the quantitative and qualitative benefits associated with site-specific DNAPL remediation and discuss key areas of uncertainty involved with this type of analysis

This course will be of interest to consultants, environmental managers, regulators, and other stakeholders engaged in making decisions on the remediation of DNAPL source zones.

Course Leader:

Grant Carey (Porewater Solutions, gcarey@porewater.com),
27 Kingsford Crescent, Ottawa, Ontario, Canada K2K 1T7.

Contact for course registrations:

Grant Carey, email: gcarey@porewater.com, Telephone: +1-613-270-9458, Fax: +1-613-270-8395, Mail:
27 Kingsford Crescent, Ottawa, Ontario, Canada K2K 1T5

Cost: FREE