#### Hands-On Training for Environmental Risk Assessment



# contaminated lands

#### and controlled waters

#### the software

The RBCA Tool Kit for Chemical Releases is a comprehensive modelling and risk characterisation package for human health and controlled water risk assessment for contaminated land. The software combines contaminant transport

models and risk assessment tools to calculate baseline risk levels and derive risk-based cleanup standards for a full array of soil, groundwater, surface water, and air exposure pathways. The ease-of-use features and



streamlined graphical interface features of this software make it an essential tool for both simple and sophisticated problems.

Updated in 2007, **Version 2.0** provides expanded flexibility and additional risk and transport models, including a plant uptake algorithm, to allow for even easier application of this tool to develop risk-based soil and groundwater clean-up levels in line with CLEA-UK and P20 guidelines.

The UK has experienced unprecedented changes in risk assessment guidance in recent years following the release of the CLEA-UK model and DEFRA Way Forward Document (CLAN6/06). While anticipating major revisions of the CLEA-UK model, an alternative risk modelling approach that is consistent to the current UK practice is required for environmental consultants and authorities alike.

RBCA is considered as one of the most favoured alternative models for implementing the forthcoming changes outlined in CLAN6/06 for evaluating human health risks when fully integrated with exposure and other relevant parameters defined for UK standard land use scenarios under the CLR guidance. And for controlled waters the fate and transport algorithms within RBCA are easily amended to be compatible with the P20 approach.

#### training course highlights

- Risk assessment fundamentals
- Fate and contaminant transport modelling
- Collation of physical, chemical and toxicological data
- Getting to know the improved *RBCA Tool Kit for Chemical Releases*, version 2.0, user interface
- Review of ASTM RBCA and CLR Guidance
- Compatibility issues of RBCA with CLEA-UK and P20
- Use of RBCA to reproduce the published SGV
- Detailed considerations/adjustments for application of RBCA in the UK
- Examining the potential to implement CLAN6/06 strategy

5TH TO 6TH
NOVEMBER 2007
READING
UNIVERSITY

Capita Symonds and GSI Environmental are pleased to offer this unique two-day course focusing on the application of RBCA within the UK regulatory context for both human health and controlled water risk assessment.

#### book your place today

Online: www.gsi-net.com/Training/Register.asp

Fax/Post: Return attached form



**CAPITA SYMONDS** 

### rbca

## contaminated lands

#### and controlled waters

Hands-On Training for Environmental Risk Assessment

5th to 6th November 2007 Reading University

COST: £650 (excluding VAT) for 2 day course

20% discount on registrations booked by 28th September 2007.

Cost includes refreshments, buffet lunches, and course materials, and excludes accommodation. No refunds for canceled bookings after 15<sup>th</sup> October 2007, although substitute delegates are welcome.

Course delegates are eligible for a 20% discount on purchase or upgrade of the *RBCA Tool Kit for Chemical Releases*, version



2.0, from GSI Environmental Inc. for a period of 6 months after the course.

#### course administrator:

Fiona Manlove Capita Symonds Capita Symonds House

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 Tel:
 01342 327161

 East Grinstead
 Fax:
 01342 315927

West Sussex Email: fiona.manlove@capita.co.uk RH19 1UU Web: www.capitasymonds.co.uk

#### **CAPITA SYMONDS**

#### course instructors

#### Richard L. Bowers, P.E.

- Environmental engineer, GSI Environmental Inc.
- 15 years professional experience
- Project specialisation: risk management and strategic planning, regulatory and policy development, human health risk assessment, contaminant fate and transport modelling, in-house and commercial software development
- Primary software developer of RBCA Tool Kit for Chemical Releases and associated products.

#### Dr. Mengfang Chen

- Technical Director, Capita Symonds Contaminated Land and Regeneration Team
- 16 years professional experience
- Project specialisation: hydrogeology, human health risk assessment and numeric groundwater modelling
- Assisted in developing and validating UK Contaminated Exposure Assessment model (CLEA2000) for DEFRA and the Environment Agency
- Extensive experience in using RBCA model adapted to comply with CLEA-UK and P20 models, including successful application of RBCA to derive generic assessment criteria and site specific remedial targets for construction zones within the Olympic Park for London 2012 Games and other major regeneration sites.

#### Liz Waterfall

- Senior Hydrogeologist, Capita Symonds Contaminated Land and Regeneration Team
- 6 years professional experience
- Project specialisation: hydrogeology, human health and controlled water risk assessment, in-house software development
- Extensive experience in using RBCA model adapted to comply with CLEA-UK and P20 models

#### venue and accommodation

Black Horse House Reading University, Whiteknights Campus Reading RG6 6AQ. Discounted accommodation for course delegates may be booked at least 2 weeks before the course date on

0118 378 8906

Map and direction: <a href="https://www.fmd.rdg.ac.uk/rcsConference/findUs.asp">www.fmd.rdg.ac.uk/rcsConference/findUs.asp</a>



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#### **CAPITA SYMONDS**



Hands-On Training for Environmental Risk Assessment

5th to 6th November 2007, Reading University RBCA for Contaminated Lands and Controlled Waters

#### **Registration Form**

Please return your form by fax on +44 (0) 1342 315927 or post to Fiona Manlove, Capita Symonds, Capita Symonds House, Wood Street. East Grinstead. West Sussex RH19 1UU. UK

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Title:	Forenames:
Surname or family name:	
Address:	
Town:	County: Country:
Daytime Telephone:	Fax:
Email Address:	
Company/Institution name (for label badge)	
Conference Fees: Before	28 <sup>th</sup> September After 28 <sup>th</sup> September
	£520.00
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Payment may be made by one of the methods below and must accompany the registration form. Please note your registration will not be processed until payment has been received in full.	
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