



# PROGRAM OF MODULES FOR 2012

Each module – presented by a panel comprising regulators from OEH, site auditors, industry specialists, CSIRO, Sydney Water and academics from UTS and other universities – uses a mix of workshops, lectures, site visits and case studies.

## MODULE A GROUND RULES FOR CONTAMINATED SITES 8 -10 FEBRUARY

### Topics

- > Legal and regulatory responsibilities of professionals working on contaminated sites
- > Understanding “risk of environmental harm” as driving force in CSARM

### Features

- > In depth discussions on recent changes to CLM Act, regulation and guidelines
- > Case studies that illustrate applications, including participation from ex-Federal Court judge
- > Site visit

## MODULE B EFFECTIVE CONTAMINATED SITE ASSESSMENT 28 – 30 MARCH

### Topics

- > Purposes & practice of site assessment
- > Design of field assessment and principles of field sampling that achieve results
- > Assessment and remediation of groundwater contamination with certainty
- > Uncertainty of results and non-technical issues

### Features

- > Effective reporting of site assessment to discuss issues of assessment and case studies
- > Site visit and workshopping problems.

## MODULE C DEMYSTIFYING CONTAMINANTS 30 MAY – 1 JUNE

### Topics

- > ‘Must-know’ about contaminants of concern
- > Sampling effectively for evaluation of contaminants
- > Practical application of quality considerations and Data Quality Objectives
- > Contaminants in sediments and groundwater

### Features

- > Relevant examples from case studies
- > Workshop on contaminant detection
- > Focus on sediments & groundwater

## MODULE D CONTAMINANTS AND TOXICITY 18 – 20 JULY

### Topics

- > Essential toxicology in site assessment
- > Toxicity evaluation in human health risk assessment
- > Fate, transport and transformation of contaminants in the environment
- > Appropriate methods for assessing toxicity and risk of harm

### Features

- > Examples of toxicity assessment case studies and guidelines
- > Expert advice on ecotoxicology investigations, including presentation from an environmental manager
- > Visit to environmental laboratory

## MODULE E RISK BASED SITE ASSESSMENT 19 – 21 SEPTEMBER

### Topics

- > Risk assessment as a tool for site assessment
- > Human health risk assessment and ecological risk assessment
- > Developing regulatory guidelines for soils, waters, groundwater and sediments using risk assessment approach.

### Features

- > Visit to sites that are described in case studies
- > Defensible reporting in risk assessment
- > Tools of risk assessment


## MODULE F REMEDATION PRINCIPLES AND CLOSURE 7 – 9 NOVEMBER

### Topics

- > Remediation and regulatory framework relating to contaminated site management
- > Developing Remediation Action Plan for large and small sites
- > Guidelines for defensible reporting for all of assessment and management
- > Role of site auditors and consultants

### Features

- > Site visit to remediated sites
- > Remediation design and execution
- > Defensible reporting for CSARM
- > New developments in remediation technologies



**“As a Local Government regulator, the course provided invaluable insight and case studies into the applied world of contaminated lands assessment, remediation, and management and helps to stem that gap between the differing view points and needs of the regulator, consultant, and site auditor. A must for anyone working, or wanting to work, in the contaminated lands sector.”**

**Oliver Bradshaw**  
Environmental Project Officer, Bankstown City Council

**“I completed the six CSARM short courses in 2010/2011, and found the modules to be interesting and worthwhile. I enjoyed the interaction with OEH, Auditors, experts and other course participants with wide and varied experience in the complex field of contaminated land management. The application of regulatory guidelines and policies to case studies and examples was particularly beneficial. Completing the course has provided me with a better understanding of regulatory requirements and expectations for the assessment and management of contaminated land.”**

**Chris Bozinovski**  
Principal, Douglas Partners Pty Ltd.