



LANDFILL AND GROUND GAS INVESTIGATION, RISK ASSESSMENT AND REMEDIATION

9 and 10 May 2011 (2 days), Melbourne, Victoria

A professional education course offered by ACLCA Victoria and presented by **Steve Wilson** and **Geoff Card**



COURSE DESCRIPTION

Landfill gas has become a major concern in Australia as a result of recent incidents where landfill gas has migrated from landfill sites and into buildings. This is particularly acute in residential developments. The Australian Contaminated Land Consultants Association (ACLCA) recognises a skills gap for geo-environmental professionals with respect to assessing the risks posed by landfill gas. The proposed course will address this by providing sessions covering ground investigation, risk assessment and remediation related to landfill gas.

PRESENTERS

Steve Wilson *is the Technical Director of EPG Ltd, Warrington, UK.*

Geoff Card *is Director of GB Card and Partners, London, UK.*

Both presenters have been intensely involved in all aspects of landfill and ground gas investigations, risk assessments and remediation for a number of decades and are the main authors of landfill and ground gas guidelines in the UK for many years and most recently authored the "Ground Gas Handbook" (Whittles Publishing, 2009). Steve and Geoff have provided training courses on landfill and ground gas issues to consultants, regulators, councils, universities and other stakeholders for many years in the UK and more recently in Australia (2009). Steve and Geoff can be considered as two of the main experts on landfill and ground gas issues in the UK.



FEES

(inclusive of GST)

Earlybird* ACLCA members

— **AUS \$900**

ACLCA members

— **AUS \$1,000**

Earlybird* non-ACLCA members

— **AUS \$1,100**

Non-ACLCA-members

— **AUS \$1,200**

**Early bird registration must be received by 4 April 2011*

Register at www.aclca.org.au

COURSE LOCATION

CQ Functions

113 Queen St

Melbourne, Victoria

www.cqfunctions.com.au

ACCOMMODATION

Citiclub Hotel

113 Queen Street

Melbourne, Victoria

www.cqmelbourne.com.au

CONTACT INFO

For more information contact

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DAY ONE – 9 MAY 2011 LANDFILL GAS RISK ASSESSMENT

8.30am Arrival and coffee

9.00am -Introductions

PPT1 Setting the scene — Australian and UK experience and specific UK and Australian guidance

PPT 2 Sources of gas and current generation rates and how to use this data in risk assessments

10.30am – 11.00am Coffee break

PPT3 Gas specific site investigation requirements. Laboratory testing, gas well installations and gas monitoring methods

12.30pm – 1.30pm Lunch

PPT 4 Migration pathways — general and discrete pathways, migration mechanisms and simple migration calculations

PPT 5 Conceptual risk model, including migration pathways and pathways into buildings. Qualitative risk assessment and risk screening from UK guidance CIRIA, BS8485, etc

3.00pm – 3.30pm Coffee break

PPT 6 Quantitative risk assessment, risk of gas migration and venting, comparison of risks, fault tree, time series analysis

5.00pm Finish

DAY TWO – 10 MAY 2011 REMEDIATION OF LANDFILL GAS MIGRATION

8.30am Arrival and coffee

PPT1 General overview – what are we trying to achieve and different types of protection i.e. protection to development near to old landfills (not landfill design for new landfills). Specifics of typical Australian construction with respect to landfill gas

PPT 2 Building protection methods including standard details for residential buildings from DR AS2780 Residential Slabs and Footings

10.30am – 11.00am Coffee break

PPT3 Building protection design – BS 8445, CIRIA C665 and NHBC, ventilation design and worked example

PPT4 Gas resistant membranes – design issues, verification of installation, post installation testing

12.30pm – 1.30pm Lunch

PPT 5 In-ground barriers - methods

PPT 6 In-ground barrier design and specification

3.00pm – 3.30pm Coffee break

PPT 7 Barrier case studies

5.00pm Discussion and finish