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Ground Gas 2019

9 May, London

About this event

Ground Gas is returning to **London** on the **9 May**, and will once again provide the latest information on ground gas assessment, verification, validation and protection through a balanced mix of practical case studies, new research and policy updates, combined with interactive Q&A sessions and extensive networking opportunities.

Last year's delegates said

'Very informative and a great update on the current market'
- Kevin Dodds, *Director*, Delta Membrane Systems Ltd

'The topics covered highlighted significant issues in the industry'
-Robert Jiagge, *Regional manager*, ST Consult

'Inspiring, informative day, with a good range of speakers'
- Asa Strickland, *Associate Environmental Consultant*, Sweco Environment

'The highlight of the day was the ability to network and talk to people who are experts in the field'
- Lorraine Droogmans, *Principal Environmental Engineer*, Wardell Armstrong

This event is CPD certified.

CPD MEMBER
The CPD Certification Service
Collective Mark

Why attend?

Expert panel

This event brings together a mix of regulators, practitioners and consultants to review and discuss policy updates, innovative research and practical solutions to ensure you are best equipped to combat your most pertinent ground gas issues.

Case studies

Learn from hands-on experience in a series of case studies which will provide technical guidance and practical frameworks. You will come away with best practices that you can apply immediately within your organisation

Time efficiency and focus

Remove yourself from day to day distractions and benefit from a series of focused presentations, designed to tackle key issues and impart practical advice and guidance.

Q&A panel discussions

In addition to expert-led presentations, there will also be a number of Q&A discussion sessions throughout the day, giving you the opportunity to address your specific questions and challenges and share your opinions with others.

Networking

Meet and mingle with senior professionals in your sector, and make the most of this invaluable networking and knowledge-sharing opportunity.

09.00 Registration and Refreshments

09.30 Opening Remarks from the chairman:

Hugh Mallett, *Technical Director,* BuroHappold

09:45 Time for a Brand New Way Forward for Gas Risk Assessment

It is 20 years since Wilson and Card was published in Ground Engineering. Remarkably it still underpins the Characteristic Situation approach in BS8485: 2015 + A1: 2019: 2019.

Geoff and Steve thought it was about time the agenda was moved on and reduced the inherent over conservatism and often unnecessary use of gas protection in the industry. They will present a new approach for ground gas risk assessment, based on worldwide experience and guidance

Geoffrey B. Card, *Director*, GB Card & Partners and Steve Wilson, *Technical Director*, EPG

10:20 Panel and Audience Participation Discussion

10:40 Proven Active Soil Gas Sampling Techniques for Efficient Site Characterization, Vapor Intrusion Investigation and Mitigation

- Considerations
- Active vs Passive
- Proven Sampling Techniques / Case Studies
- Family of Products
- Uses

Laurie Chilcote, *Managing Director*, VaporPin

11.10 Morning Refreshments and Networking

11.40 Receptor Monitoring and Risk Assessment for Ground-Gas

With the publication of CIRIA C735 there is a much greater focus on the quality of gas protection measure installation and its validation. Where doubts remain regarding the quality of the installed gas protection installation or where validation reports are missing, developers face the risk of having unsaleable properties as planning conditions cannot be discharged. The available options available are limited to:

a) Demolition and rebuild
b) Retrofit measures where possible
c) Receptor Monitoring and Risk Assessment

This presentation will discuss the context of inadequate gas protection installation and the available techniques and best practice for receptor monitoring and risk assessment. Case studies will be referenced throughout including, high resolution sub-floor void monitoring, internal monitoring and sampling and how these can be used to inform risk management decisions for both new build and existing properties. Examples of common problems and poor workmanship will be provided.

Simon Talbot, *Managing Director*, GGS

12:10 Machine learning applied to ground gas and data analytics

- Taking advantage of the ever-increasing amounts of continuous monitoring & environmental data and combining with machine learning based tools
- Rapid gathering, processing & analysis of ground gas data with minimal human interaction
- Understanding the exciting potential capabilities of AI within the brownfield sector

Maryam Hussain, *Head of Data Analytics*, AmbiSense

12.40 Interpreting data and the use of digital tools

13.10 Networking Lunch

14:00 Welcome Back

Hugh Mallett, *Technical Director*, BuroHappold

14:10 Discriminating methane sources in ground gas emissions in NW England

The identification of the source of methane (CH4) and carbon dioxide (CO2) in gases within unconsolidated deposits outside municipal landfill sites, where there are multiple potential contributing gas inputs, is important for regulation and to inform gas management policy.

Christopher J Teasdale, *Author*, 'Discriminating methane sources in ground gas emissions in NW England'

14.40 Vapour intrusion, latest trends and practices

Dr John Andrews, *Associate Technical Director*, RSK Environment

15:10 Ground Gas Protection Measures

15.40 Afternoon Refreshments and Networking

CASE STUDIES

Case studies - Ground gas investigation, risk assessment and remediation

16:10 Removing the Risk - Boo Hole Landfill Site

Boo Hole, a former landfill, was determined as statutory contaminated land under Part 2A of the Environmental Protection Act 1990, made on the basis of the potential significant risk to human health associated with migration of hazardous ground gas towards residential properties located on the eastern and southern boundary of the site. The landfill was historically worked as a sand quarry from circa 1893 for approximately 60 years. The quarry commenced accepting landfill waste from approximately 1971 until the 1990s when the site was closed and landscaped.

Michael Moore P, *Environmental Health Senior Officer*, Public Protection, Rochdale Metropolitan Borough

16:35 Case Study

17:00 Case Study

17:25 Question and Answers

17:35 Closing Remarks

Hugh Mallett, *Technical Director*, BuroHappold