

SiLC Newsletter

News update by the SiLC Champion

June 2013

Issue 10

SiLC Annual Forum



For a second year the Royal Society of Chemistry provided the venue to host the SiLC annual forum held on 30 April 2013. Whilst the event was attended mainly by SiLCs there were a range of attendees from across the sector. Once again Dr Morwenna Carrington from Defra was kind enough to give a presentation, providing an update on the Category 4 Screening Levels (C4SL) project and addressing some of the concerns which had been raised recently by SiLC. Her presentation came a few days ahead of the third and final stakeholder workshop and the forum were informed that the project was on programme and that a robust peer review would be carried out of the methodology and reports including a peer review by the Committee of Toxicology regarding the toxicology methodology used for the development of the Low Level of Toxicological Concern used in the assessment.

Asbestos and ground gas/vapour have been popular topics over the last couple of years and a number of documents have or are due to be published during 2013. Professor Paul Nathanail gave an interesting presentation on the assessment of asbestos in soil and made ground summarising the information covered in the documents which have been prepared or currently in production and raising a number points associated with the complexities and uncertainties of assessing asbestos in soils. Similarly ground gas has seen its fair share of documents published recently and Richard Owen provided an overview of the new CIRIA Research Report – Testing and Verification of Protection Systems for Buildings Against Hazardous Ground Gases and the two British Standard documents, the revision of BS8485: Characterisation and Remediation of Ground Gas in Affected Developments and the new BS 8576: 2013 – Guidance on Ground Gas Investigations.

Frank Evans, National Grid provided a landowners view on managing risks, looking how published legislation and guidance can have an effective on remediation forecasts. Finally, Roger Clark provided a brief presentation on a proposed SiLC Trainee Network scheme aimed at encouraging practitioners in the sector to join a professional body and work towards a professional qualification and to promote higher standards in the sector.

SiLC would like to thank all the speakers who have kindly allowed their presentations to be uploaded to the SiLC website and can be found at the following [link](#)

SiLC would also like to thank all attendees who completed the on-line questionnaire. Based on this survey, the majority of those who completed the questionnaire are registered SiLCs, although a few who responded to the survey are in the process of applying for SiLC. Overall, the respondents were satisfied with the forum presentations. Suggested topics for future forums include risk communication, radioactively contaminated land, risk modelling for lead contaminated land and vapour risk assessment. SiLCs welcome any ideas for topics and on the structure of future forums. Please send your suggestion to info@silc.org.uk

Linked In



SiLC has established a group on Linked In. Initially the group is for SiLC Assessors and Professional and Technical representatives of SiLC to provide a forum for discussion on the administration of SiLC, the assessment process or any other matters in the sector, particular where SiLC may be involved or it is of interest to SiLC.

Overtime the intention is that the group will be available to all SiLCs. All views are welcome on this and how best we can use the group as a means of meaningful communication. Please e-mail your thoughts to info@silc.org.uk

Key Dates for 2013

- SiLC Introduction Day
- 2 Oct - London
- Exam dates
- Round 2 - 26 July

Events - follow the link

- [Geological Society](#)
- [RSC](#)
- [ICE](#)
- [CIWEM](#)
- [IEMA](#)
- [RICS](#)
- [CIEH](#)
- [REHIS](#)
- [AGS](#)
- [CIRIA](#)

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“...The skills needed to effectively deliver UK contaminated land policy span diverse fields of human endeavour including science, engineering, humanities and mathematics...”.

“The panel is made up of eleven experts from the regulatory authorities, consultancy, academia and industry. Five of the panel members are SiLCs”

Identification of skills requirements for the delivery of contaminated land policy

A few years ago DEFRA commissioned a number of research studies on the contaminated land and remediation sector, including the report SPI003 entitled Identification of Skills Requirements for Delivery of Contaminated Land Policy, prepared by the University of Nottingham. The report discusses the broad range of skills that are necessary to deliver on contaminated land management, it is stated that “...The skills needed to effectively deliver UK contaminated land policy span diverse fields of human endeavour including science, engineering, humanities and mathematics...”. No individual practitioner can claim, or would be expected to have expertise in all these disciplines although it is necessary that all these skills sets are brought together and managed to deliver effective assessment of contaminated land.

The Draft Brownfield Skills Strategy study carried out before 2008 identified there was a predicted skill shortage in the broader skills sets necessary to deliver on contaminated land and remediation policy, although the study predicted an over supply of environmental specialists. Since this study there has been significant changes in the economic situation in the country and the Brownfield and land regeneration sector which had been largely reliant on the construction sector fuelling its growth. The sector has shrunk resulting in an over supply of practitioners in the market, although changes in working practice has accommodated some of this capacity. The increase of capacity has not addressed the capability of practitioners and this is the focus of the study of the skills document. The report weaves its way through different roles in planning and Part 2A regime and identifies the skills-gap necessary to deliver in these roles. At times the report appears to stray from information on skills specifically although this reflects the broad aspects of the subject and how events, policy, regulation, technical disciplines, communication and many other activities interact to perform and deliver the role of contaminated land management. It would be simplistic to come up with a basic set of criteria for practitioners, although the report includes an inventory of skills for contaminated land inspection, assessment and remediation presented at Appendix I. A table included at Appendix I is intended to be used to assist in recording the skills of a practitioner which could be used as a log book for continued professional development.

This table includes “...a comprehensive list of skills needed to inspect, assess and remediate land affected by contamination has been presented in a form suitable for an individual to use to log their skills and thereby manage their future skills development plan. The Appendix may also be of use to employers seeking to encourage and where mutually beneficial support staff to further develop their skills...”

The report acknowledges that the nearest mechanism for demonstrating competence of practitioners is by being on the Specialist in Land Condition Register or for engineers and geologists being on the Register of Engineering Professionals. It is encouraging that the benefits of the SiLC scheme are raised throughout the report. The SP series of research documents published by DEFRA provide a good insight and assessment of the contaminated land sector and this latest release complements other reports in the series.

National Panel of Experts—update

A National Panel of Experts has been set up to provide independent advice to Local Authorities in making decisions on cases where the decision as to whether land is or is not contaminated within the meaning of Part 2A. The panel is made up of eleven experts from the regulatory authorities, consultancy, academia and industry. Five of the panel members are registered SiLCs.

The National Panel is now in a position to accept cases. Local Authorities can submit information about sites to the National Panel where they consider that a site is viewed as borderline between Category 2 and Category 3 and they need assistance in making a judgement. The Local Authority will need to demonstrate they have followed all the procedures set out in the Statutory Guidance before requesting assistance from the panel. The intention is that these cases studies will become available and should assist in the decision making process on other cases. The case studies will be published on the CL:AIRE website. Further details are presented on the CL:AIRE website at the following [link](#).

New standard for gas investigation

A new British Standard BS 8576:2013 Guidance on investigations for ground gas - Permanent gases and volatile organic compounds (VOCs), has been published. The standard provides guidance on ground gases, volatile organic compounds and permanent gases such as carbon dioxide, methane and oxygen. BS 8576 has been created through the collaboration of experts within the field such as the Chartered Institute of Environmental Health, Environment Agency and the Institution of Civil Engineers.

The new standard includes a framework for assessing development sites and the risks posed by gassing sites and guidance for the investigation of gases under part 2A of the Environmental Protection Act 1990 and the Environmental Damage Regulations for example assessing the vapour risk from oil spills. It is intended that the guidance complements BS 10175 Investigations of potentially contaminated sites - Code of practice. Therefore it is of particular interest in assessing site for development and the risks posed by gassing sites to neighbouring land and the development sites. BS 10175 advises early consultation with regulators when potentially contaminated sites are to be investigated and this advice applies equally to investigations for ground gas. Annex A of BS8576:2013 describes the regulatory framework in the UK and the roles performed by different regulators.

The guidance covers the importance assessing information is used to develop a conceptual model of the site and surrounding area including considering new receptors associated with the

construction and completion of the new development, as well as existing receptors. To understand site conditions as well as is practicable and to be able to prepare a robust risk assessment, a range of information relating to the site conditions and monitoring should be recorded and reported in addition to measured parameters such as gas concentrations, borehole flow rates and details of the monitoring wells. Chapters 9 and 10 of the standard set out details on construction monitoring wells, procedures for monitoring including the types of instruments to use, what information to record, frequency of monitoring, sampling for laboratory analysis, active and passive sample techniques and collecting and transporting samples. Annex F including further information regarding an assessment of whether sufficient gas monitoring data have been collected.

Site investigation is an integral part of risk assessment and the British Standard recognises the need for the information requirements for satisfactory risk assessment to inform the design of the site investigation programme. However, guidance is not provided on risk evaluation and characterisation for example where the investigation is used to collect information to aid design of protective measures, and such guidance on this assessment can be found in CIRIA C665 and CIRIA Report C682, *Ground Gas Handbook*. Furthermore it is expected that BS 8485, will be revised in the near future and this document provides recommendations and describes methods for the assessment of methane and carbon dioxide during new development of affected sites and appropriate protective measures for buildings.

SiLC Trainee Network

At the SiLC Annual forum it was announced the intention to set up a SiLC Trainee Network. One of the aims set out in the SiLC Code of Practice is to "... give reasonable assistance to candidates wishing to join the profession...". Encouraging individuals to become a member of professional bodies and to pursue professional qualifications should be an objective for senior practitioners working in the sector when mentoring staff. The SiLC register has a role to assist in these aims by working with professional bodies and institutions and the wider sector through involvement with a range of forums, committees and specialists groups and to engage with on-line discussion groups.

There are good reasons to gain professional status and become Chartered as it demonstrates that your competencies have been impartially assessed by other professionals, the qualifications are recognised nationally, there is a Code of Conduct to abide by and such qualifications are respected and valued by employers and clients. By developing a SiLC Trainee Network and encouraging practitioners to become members of professional bodies and progress to Charter Status this will create greater momentum and growth in the SiLC Register and underpin the scheme in the long-term. To assist in the support the scheme, SiLC will prepare guidance on how Skills Development Framework should be implemented in the context of the SiLC Trainee Network. The SiLC scheme is about setting higher standards in the industry and it is hoped all SiLCs will support this initiative.



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SiLC Champion Feedback

Do you have something to say about SiLC or any other topics? We would welcome contributions to the Newsletter

Presentation materials about SiLC are available - contact the secretariat

Regards

**Kevin Eaton
SiLC Champion**

Supporting Organisations



Revised waste classification for oil and asbestos in soils

The Environment Agency is due to issue revised technical guidance on waste, referred to as "rWM2". The earlier document WM2 entitled 'Interpretation of the definition and classification of hazardous waste' was last updated in April 2011. The document was developed and jointly published by the Environment Agency England and Wales, Scottish Environment Protection Agency and the Northern Ireland Environment Agency to provide guidance on the assessment and classification of hazardous waste based on the revised Waste Framework Directive definition of hazardous waste.

The Environment Agency propose a number of revisions on the classification of certain wastes which may have implications on contaminated land management. For example, the guidance will contain new worked examples of how to classify as hazardous waste, soil and other waste materials such as made ground and general construction and demolition wastes that are contaminated by asbestos fibres and asbestos-containing materials. The guidance also addresses the classification of hazardous waste associated with waste oil, wastes other than waste oils containing and contaminated with oil and coal tar. The classification will not only be based on the concentration of hydrocarbons recorded but taking account of the percentage of marker compounds which may be present such as carcinogens benzene and benzo(a)pyrene. This approach is used currently and soils contaminated with petroleum hydrocarbons and/or polycyclic aromatic hydrocarbons (PAH) may be classed as hazardous if the relevant threshold concentrations (0.1% or 1% depending on category) are exceeded. The classification process is not straightforward, and the Environment Agency published the document entitled 'How to find out if waste oil and wastes that contain oil are hazardous: A guide to the Hazardous Waste Regulations' reference number HWR08 Version 3.1 in June 2007. Whilst rWM2 is still in consultation, it would appear that a similar approach will be adopted, although for PAH contamination it is understood that it is intended to assess the classification considers the use of just one marker PAH compound, benzo(a)pyrene.

The approach for classifying soils and made ground containing asbestos is also not straightforward. Waste with asbestos at or more than 0.1% is categorised as hazardous waste although currently there is neither a standard method for

determining the amount of asbestos present in soil or a generic assessment criterion for asbestos in soil or even an agreed minimal risk level.

There has been an absence of guidance over many years with the only publication on this matter being the Interdepartmental Committee on the Redevelopment of Contaminated Land (ICRCL) Guidance Note 64/85: Asbestos on Contaminated Sites. There are various health and safety publications covering asbestos issues including the Control of Asbestos Regulations 2012 (CAR2012). Whilst it is not stated specifically in the CAR 2012 the reference to 'premises' could include land as well as structures on the premises and should intrusive and excavation work be carried out at the premises with known or probable asbestos in soil materials, then according to the CAR 2012 the duty holder has a legal responsibility to carry out an asbestos assessment and where asbestos is identified to prepare an Asbestos Management Plan where there is an unacceptable risk of asbestos exposure to employees or the general public.

There are many on-going initiatives looking at asbestos issues, some of which were reported in the SiLC Newsletter 9, including the initiative by the Environmental Industries Commission (EIC) and CL:AIRE who have set up the Asbestos in Soil, Made Ground and Construction Materials – Joint Industry Working Group (Asbestos in Soil JIWG). CIRIA is due to published a document entitled 'Guide to managing and understanding the risks of asbestos in soil and on Brownfield sites' latter this year and the Asbestos in Soil JIWG has also been working alongside CIRIA on preparing this publication. The Environment Agency has agreed with the Asbestos in Soil JIWG that there is a need to provide industry with refined, detailed and practical guidance in the area of waste classification with the intention to develop a more pragmatic approach to regulation and which will ultimately form part of the development of the JIWG Industry Code of Practice for Asbestos in Soil, which may be published in 2014.

SiLC application

The next SiLC Introduction Day is 2 October in London. The cost is £99 for the public sector and £148.80 for the private sector. Booking forms are on the web-site. For anyone attending the introduction day an additional fee for the SiLC assessment application is £75.96 for the public sector and £126 for the private sector.

The SiLC register...

—is your name on it?