



Summer Workshop 2016

Site Investigation and Risk Assessment for Historic Landfill Redevelopment

Tuesday 28 June 2016

[Engineers House Conference Centre](#), The Promenade,
Clifton Down, Bristol, BS8 3NB

Risk assessment topics that will be covered

- Conceptual site model and site investigation
- Controlled waters
- Part 2A & planning
- Case studies on landfill gas and remediation
- Landfill mining and reclamation

The 7th in our series of SOBRA's summer workshop will follow the usual format – delegates can expect a series of presentations in the morning followed by focus group discussions in the afternoon breakout sessions. We hope that further avenues of research and development will stem from the different focus groups to help deliver high quality risk assessments and aid landfill redevelopment.

The provisional programme is available [here](#)



If you would like to help us write up the workshop findings by being a rapporteur, please e-mail us at info@sobra.org.uk



We look forward to seeing you there!



SoBRA's Vision for 2016

SoBRA's goals are to improve technical knowledge in risk-based decision-making related to land contamination applications and enhance the professional status and profile of practitioners. These goals are primarily met through our summer workshop events, the Christmas conference and the work of our sub-groups which facilitate members from different companies to work together and move our industry forwards.

The society has 7 core objectives that support these goals that are found on our website. In summary they are to assist in the development of future guidance, identify, fund and co-ordinate future research areas, support technical excellence in the assessment, estimation and evaluation of risks and uncertainty from land affected by contaminants, encourage good practice in risk-based decision making, facilitate knowledge sharing and form relationships with other organisations and professional bodies involved in land contamination and remediation.

FAST FACTS

Over 450 members

7 years

Official launch of the Society in Birmingham, May 2009

The members of the accreditation sub-group are a prime example of what can be achieved when SoBRA members work together.

The executive committee thanks them for their dedication to this project and for their part in improving risk assessment standards across the industry.

SoBRA's activities

- Summer workshop in June
- Christmas Conference in London
- Focus sub-groups
- Newsletter
- Scholarships

Delivering SoBRA's core objectives

The society this year will focus on delivering the accreditation scheme and promoting the society by:

- **Launching the SoBRA accreditation scheme** before November 2016 to support the core objectives of the society with respect to technical excellence and encouragement of best practice.
- **Promoting SoBRA's activities** to share risk assessment knowledge and broaden relationships with relevant professional bodies by actively marketing ourselves throughout 2016.

To support this, the vice chair will now take on the role of marketing the society which will be a good introduction to the future Chair role.



To help launch the scheme we have invested in our website which will be launched after the summer workshop to avoid any potential booking hitches! Further details on the accreditation scheme and the website are included in the newsletter.

Concurrent with launching the accreditation scheme we need to build awareness of the scheme and the society across industry. Therefore, we have put together a marketing plan to help us with this which includes identifying opportunities to partner with and/or undertake joint events in a similar manner to those we have done periodically with SAGTA for C4SLs, engage with local regional forums and speak at events.

In this regard we'd like to announce that we are partners for the Contamination Expo event (landremediationexpo.com) on 12th and 13th October in London.



If you plan to attend the event we'd love to hear from you (info@sobra.org.uk) as we will have a stand and be reliant on sharing the load by members helping for a couple of hours to spread the word of our good work!

We will of course also be holding the summer workshop to improve technical knowledge and share ideas.

Following last year's vote, the workshop is focussed on 'Risk assessment to support redevelopment of historical landfills' and will be held in Bristol. This topic allows us to focus on many of the issues you raised when we have asked for feedback on future topics you would like us to cover. We hope to see as many of you there as possible for useful discussion and knowledge sharing!

Finally, many thanks for supporting the society and we hope you all continue to participate in our events, support the society and see the benefit of our collective achievements.

Lucy Thomas – Chair

**EXCITING TIMES
AHEAD**

SoBRA Register of Brownfield Risk Assessors

The SoBRA Accreditation sub-group has been hard at work in finalising the documentation and procedures for the upcoming SoBRA Register of Brownfield Risk Assessors.

We are aiming to **officially open the scheme to applicants in July this year, with a deadline for the first window of applications set as the end of October.**

This will give us time to appoint Scrutineers to assess the first batch of applicants.

If you feel that you would like to be a Scrutineer, please contact us at info@sobra.org.uk and we can send you the application forms and supporting documentation.



Information about the scheme will be available on our website in July when the scheme is launched. As always, if you have any questions, please contact us at the aforementioned email address.

Feedback on the 2015 December SoBRA Conference

Current issues in contaminated land risk assessment

Our joint Christmas Conference with the Royal Society of Chemistry at Burlington House in Piccadilly was sold out once again. The conference follows a popular format which includes a good balance of updates from Regulators, SoBRA Subgroups and case studies, and our AGM.

We also had posters on display showing interesting case studies. In addition to all of this was excellent food, a glass (or two) of wine or a beer afterwards, and the opportunity to network with friends and colleagues from around the country. The conference is often described by delegates as “the highlight event of the year” and we hope to uphold this high standard. We look forward to seeing you all again at the end of the year.





SoBRA would like to take this opportunity to once again thank all speakers, delegates and organisers for making the 2015 December conference a successful event.

All presentations are available on the website at <http://www.sobra.org.uk/resources/SoBRA-presentations/December-2015-Programme>

FEEDBACK

“It was great to get a feel of where the industry and regulatory environment is at in relation to contaminated land”

“Very informative and from a broad spread of representatives”

“Excellent updates and networking opportunities”

“Good to get an overview of what is happening within the industry”

“the Dutch speaker was very good”

Our next **Christmas Conference will be on the 13th December 2016**, so please pencil this date into your calendar.

SoBRA's members' suggestions for future topics

- Emerging contaminants especially PFCs, MTBE, endocrine disruptors, pharmaceuticals - sampling issues and toxicological sources?
- Further detail on vapour intrusion - particularly bore installation and sampling processes which seem to be very different to the US, real vapour intrusion events and links to utility services - examples of where J&E model & similar fail?
- Mine closure risk assessment
- Controlled waters risk assessment, and vapour risk assessment
- Advances in brownfield risk assessment
- Onsite analysis versus laboratory based (off-site), how do they compare and what is the regulators view?



Joint Agencies Groundwater Directive Advisory Group (JAGDAG) Consultation - closes 31 May 2016



The Joint Agencies Groundwater Directive Advisory Group (JAGDAG) is currently consulting on proposed revisions to the Methodology for the determination of hazardous substances for the purposes of the Groundwater Directive (2006/118/EC).

The methodology is relevant to anyone who has responsibilities for inputs of pollutants to groundwater or who conducts any activity that could give rise to such inputs. This includes professional advisers to operators of such activities, trade associations and anyone else with an interest in groundwater protection, including members of the public.

JAGDAG are seeking views on the proposed changes up until 31 May 2016.

You can share your views on the proposals by:

1. Downloading the consultation documents [here](#); and
2. Filling in the feedback form and returning it to JAGDAG via the email address JAGDAG_England@environment-agency.gov.uk.



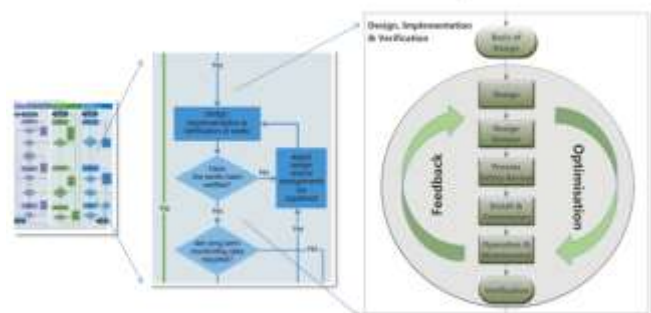
RemSoc - The Society for Remediation professionals in the UK



RemSoc is the only society dedicated to Remediation in the UK and maybe considered as a Sister to SoBRA with a similar ethos and constitution.

RemSoc is a new society which has been established by a group of practitioners from the UK remediation industry who have a broad knowledge of the industry, the market and clients that they are serving and are passionate about doing remediation right. The society in embryonic form was established in March 2015.

A framework for remediation design?.....
Discussion for another day....



RemSoc – What and Why?

As our industry matures, we believe that in many instances remediation activities continue to be implemented with little reference to industry best practice, both in relation to technical standards and from a health and safety perspective. Our goal for RemSoc is to establish a forum within which people involved in the remediation industry can discuss aspects relating to good practice.

RemSoc Objectives

- To provide a forum within which people working and involved in the remediation industry can discuss aspects relating to good practice, to encourage the participation of 'early career professionals' and facilitate the dissemination of knowledge regarding remediation;
- To develop a framework for the design, implementation, optimisation and verification of remediation works with reference to Implementation of the Remediation Strategy within CLR 11;
- To promote best practice in process safety assessment and management within the implementation of remediation techniques;
- To facilitate the development of material that supports the framework through guidelines, training courses etc;
- To form relationships, but not memberships unless in accordance with the Notice of Association procedure, and work in a constructive manner with other organisations and professional bodies involved in land contamination and remediation;
- To identify areas where further research in our field is required with the aim of encouraging the society or others to pursue these goals.

Inaugural Conference

The RemSoc inaugural conference was held on the 9th of February in Birmingham with 150 conference participants.

The conference was divided into 5 sessions with the first session focussing on who RemSoc are and what we hope to achieve. The second session focussed on Clients and their objectives and issues with remediation. We then moved on to the Early Career Practitioner



(ECP) and their needs and experiences and how RemSoc can aid young practitioners through mentoring and training. This session was developed using an on-line survey of ECP's and also included a Day in the Life of Charlie, a typical ECP. As part of this session we included trialling the use of designated lunch partners in order to give ECP's access to more senior practitioners and to encourage them to discuss their interests and experiences with remediation. The next session was on Process Remediation, pertinent H&S legislation which applies to the design and construction of remediation systems, the need for HazOps and HazIds and what can go wrong with remediation systems.

We rounded out the day with a discussion workshop with great delegate participation with regard to needs of the industry, best practice and how RemSoc might participate in the National Quality Mark Scheme.



The organising committee consisted of Dr. Cecilia MacLeod, (WYG), Mr. Mark Stevenson (ERM), Quentin Hulme (Cornelsen), Charles Humphries (Amec Foster Wheeler), Richard Clayton (WSP-PB), Steve Edgar (Vertase FLI) and Andy Morgan, (Geosyntec). Presentations from the day are available to members on the RemSoc [website](#)

Next Steps & the Future of RemSoc

The inaugural conference was a success and the response was positive. The steering committee are planning the future of the organisation and are in the process of drafting a newsletter, deciding on initial working groups to further the interests of RemSoc, Early Career Practitioner initiatives and reviewing the findings of our feedback survey.

We would be pleased to hear from anyone wanting to support any of the initial working groups as we move to the next stage. The initial working group topics are:

INITIAL WORKING GROUP TOPICS

- Early Career Practitioner development;
- A framework of guidance within the “Design, Implementation and Verification” box in CLR11;
- Process based remediation technology
- Non-process based remediation implementation

We are also running a logo competition, visit our [Linked In page](#) for updates.

Join Us!

To join please go to www.remsoc.org

For further information please contact us at info@remsoc.org

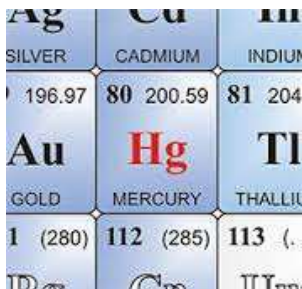


Historical Development and its Effect on Soil Contamination in Urban Areas

Rebekka McIlwaine¹, Siobhan Cox¹, Rory Doherty¹, Mark Cave²

¹Queen's University Belfast, ²British Geological Survey

The project undertaken with the assistance of the **2015/16 SoBRA Scholarship Award** is now nearing completion and a final report will be shortly available to all SoBRA members.



Ag SILVER 196.97	Cd CADMIUM 80 200.59	In INDIUM 81 204
Au GOLD 196.97	Hg MERCURY 112 (285)	Tl THALLIUM 113 (284)

The project developed a new methodology for identifying local diffuse sources of contamination and relationships between historical urban development and groups of potentially toxic elements (PTEs) in urban soils.

This allowed the identification of urban sub-domains where particular sources are expected to govern PTE concentrations. Background concentrations of the PTEs can be calculated in the sub-domains to inform assessment of risks from contaminated land.

The [Belfast Tellus data](#) was used to create the methodology, which was then tested using the [G-BASE data](#) from Sheffield. Anticipated sources of the PTEs in soils were identified using statistical and spatial techniques to interpret the data. A range of multivariate statistical techniques were used to identify PTEs which were expected to be from similar sources. The calculation of pollution indices provided an understanding of the accumulation of these PTEs in both cities. Background concentrations, calculated via a number of methods for comparison, aimed to differentiate between concentrations resulting from geogenic and diffuse anthropogenic sources and concentrations generated by anthropogenic point sources.



Many sites with redevelopment potential in urban areas are on brownfield or potentially contaminated land, with little or in-existent systematic regional spatial assessment of pollution by PTEs. The proportion of the population living in urban areas is expected to continue to rise, resulting in an increased pressure to develop and reuse urban soils. Hence such project provided an improved

understanding of the sources, concentrations and distribution of PTEs in soils at an urban scale. The findings will enable improved risk assessment and screening of urban areas through the development of urban subdomains and associated background concentrations for particular PTEs. This will provide key scientific knowledge of urban processes and tools which will inform transparent decision making in wider planning and public health issues.



Part 2A Site Investigation Former Halls Factory, Paddock Wood



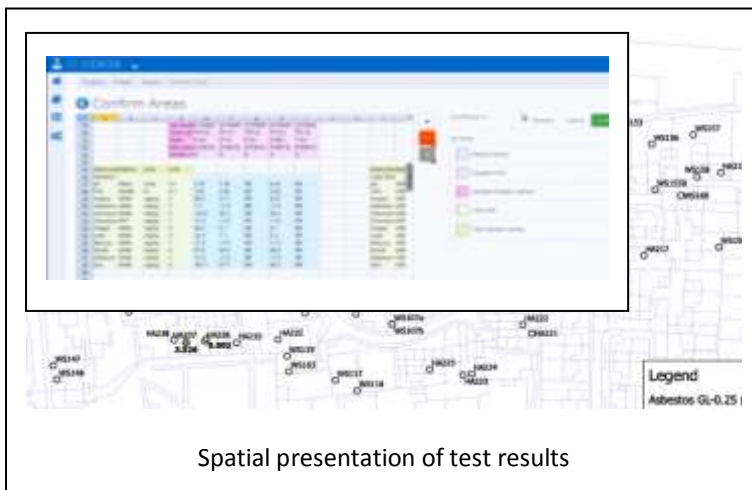
Synopsis

The award winning investigation of the former Halls site in Paddock Wood, Kent (an occupied private residential housing estate) was carried out by Leap Environmental Ltd (LEAP) on behalf of Tunbridge Wells Borough Council. The Council identified the site as a priority for investigation under Part 2A of the Environmental Protection Act 1990. The application of the latest site investigation techniques, SoBRA's guidance



and risk assessment best practice, combined with the close collaboration between all parties, brought a swift, technologically advanced, and comprehensive conclusion to a long standing and unsatisfactory problem for the Council and residents.

Site Investigation



Spatial presentation of test results

The proposed investigations gave rise to significant local community and press interest. The residents were kept informed by a series of hand delivered letters; the council website; together with afternoon and evening drop in sessions. The management of misinformation became key as national press tried to sensationalise the risks.

The investigation comprised the excavation of 120 boreholes at positions across the site, with unbiased locations and sample depths predetermined using Visual Sample Plan software, together with targeted locations for the specific areas of potential concern. The field and laboratory testing resulted in some 13,000 lines of laboratory test data/results which were compiled with results from the pre-development investigations using the Veridata™ data handling system. The key to the successful assessment of the risks and

communication to stakeholders was in the spatial presentation of test results alongside statistical assessments to confirm the site conceptual model.

Activity Based Sampling



Activity based sampling was undertaken in gardens where asbestos had been recorded. The activity based sampling (ABS) was designed and undertaken by the IOM in accordance with SoBRA guidance.

Information collected was combined with information from the earlier phase of investigation using Veridata™ and the collated information comprised a statistically robust dataset to inform the subsequent asbestos DQRA undertaken by URS. This successfully applied elements of the C4SL framework to risks from asbestos in soil.



Joining the Society – how, when?



We welcome applications for membership from individuals that have an interest in risk assessment. You can join at any time of the year and at any stage of your career. For further please visit our website at <http://www.sobra.org.uk/membership>

Members can renew their annual membership on-line and will be sent a reminder email to do so two weeks before their subscription is due. If at any stage you forget your password click on the link below the log-in box in the top left hand corner of the SoBRA website and follow the instructions you receive on the email that you will then receive.

SoBRA's photography competition

The SoBRA's photography competition is a new addition, aiming to celebrate the artistic, unusual and often extraordinary characteristics of brownfield sites.

The competition is opened to all SoBRA members and all abilities. We want to get your creative juices flowing and invite you to submit a photograph fitting the description of unexpected and inspiring brownfield site. The winning photo will be judged on impact as well as its ability to illustrate Pathways to Regenerative Sustainability of Brownfield sites.



The winner will be announced at the AGM ceremony in December at the Royal Society of Chemistry, Burlington House, London, and will receive a prize of one year's SoBRA membership. Subject to the popularity of the contest, a shortlist of images will be picked for inclusion in a 2017 calendar.

You should submit your photographs to info@sobra.org.uk with the subject heading 'SoBRA's Brownfields photo competition'.

Entry is free and you may submit up to five images.



If you have an idea for an article or would like to include an event listing in the next SoBRA newsletter, or on our website at please contact us at info@sobra.org.uk

SoBRA Executive Committee

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