

**ASBESTOS IN SOIL, MADE GROUND AND CONSTRUCTION AND DEMOLITION
MATERIALS**

**Joint Industry Working Group Meeting
MEETING No. 6 – URS Corporation, London SW1P 1PL**

17th July 2013, 10.30am – 4.00pm

FINAL

Attendees

NAME	REPRESENTING
Steve Forster - Chair	EIC
Nicola Harries - Secretariat	CL:AIRE
Trevor Howard	EA
Craig Bell	HSE
Simon Cole	SoBRA
Tracy Braithwaite	SAGTA
Seamus Lefroy-Brooks	AGS
Rob Blackburn	ATAC and ARCA
Alan Jones	IOM
Tim Elliott	RICS
Rachael Adams	MoD (on telephone)
George Kowalczyk	Public Health England
Mark Wagstaff	UKAS (replacing George Sanders)
Garry Burdett	HSL
Hazel Davidson	SCA
Joanne Kwan	CIRIA
David Wood	EIC Environmental Laboratories Working Group

Apologies

Richard Boyle	HCA
Barry Menzies	CECA and NFDC
Colette Willoughby	BOHS
John Ferguson	Balfour Beatty Major Civil Engineering

Agenda

1. Housekeeping
2. Welcome, apologies and introductions
3. Previous minutes
4. CIRIA project: "Asbestos in soil and made ground: A Guide to Understanding and Managing Risks"
 - a. CIRIA Project Manager's update
 - b. JIWG review of final draft
 - c. Outstanding issues
 - d. Endorsement
5. JIWG update:
 - a. Membership and participation
 - b. Funding
 - c. Context and strategy for completion:
 - i. Interface with CIRIA document – key points
 - ii. regulatory clarification
 - iii. key issues task group outputs
 - iv. SCA Blue Book - analytical methodology
 - v. SOBRA – risk assessment frameworks
 - d. Scope and structure
 - e. Compilation and consultation
 - f. Programme
6. Update from HSE:

- a. ACOP consultation
- b. HSG 248: revision, consultation and re-issue programme
- c. Definition of asbestos/de minimis for soils and C&D materials
- d. Quantification
- e. ALG 02/08 – withdrawal/re-issue
7. Update from Environment Agency:
 - a. Revised technical guidance on waste WM2 version 3 2013
 - b. Review of (hazardous) waste classification/regulation applied to asbestos
 - c. Review of environmental permitting
8. Update from UKAS:
 - a. Minutes of meeting with UKAS (see separate paper)
 - b. Lab 30 revision, consultation and re-issue programme
 - c. Interface with HSG248/JIWG work
9. Update from BOHS:
10. REACH: DEFRA
11. CDG/ADR: DfT
12. Further research
 - a. SAGTA
 - b. Background levels in soil and air
13. AOB

No.	DISCUSSION	ACTION
1.	<p><u>Housekeeping</u> Simon Cole (SC) provided the housekeeping and Steve Forster (SF) the chair thanked URS for providing the meeting room.</p>	
2.	<p><u>Welcome, Apologies and Introductions</u> SF welcomed everybody to the meeting. Apologies had been received from Colette Willoughby, Richard Boyle, John Ferguson and Barry Menzies. SF welcomed Tim Elliott who is representing RICS and Hazel Davidson who was representing Standing Committee of Analysts for this meeting only.</p>	
3.	<p><u>Previous Minutes</u> Garry Burdett requested some minor amendments to the previous minutes. He confirmed that he would send through the amendments for Nicola Harries (NH) to reissue the minutes as final and upload onto the dedicated website.</p>	GB & NH
4.	<p><u>CIRIA Project</u> Joanne Kwan (JK) explained that the final draft of the (reformatted title) “Asbestos in Soil and Made Ground: A Guide to understanding and Managing Risks” had been circulated to the PSG; it had also been circulated to the JIWG out of courtesy. Members of the PSG and the JIWG now had 10 days to review the document and provide comment. If no comments were received from an individual/organisation, it would be deemed that people agreed with the document. JK acknowledged that the document was extremely long and therefore advised reviewers to just focus on areas of greatest interest.</p> <p>Several people commented that, due to the range of complex issues, it was important that the document was reviewed in full, to ensure that all parts of the document were consistent and to ensure that no new, significant and/or controversial changes had been made since the last draft.</p> <p>JK asked people who had made comments to check the comments log whether their comments had been satisfactorily addressed. She did not envisage that the document would now change significantly.</p> <p>There was concern that there are still a number of comments remaining that PSG and JIWG members have raised and that it was felt have not been satisfactorily addressed. How will this be resolved? JK explained that the chair of the PSG, the research contractor, CIRIA project steering group and CIRIA have reviewed all the contentious points. The project report has then been amended with a general consent from all these different parties and</p>	ALL

<p>where there are disagreement of the original comments, there is an explanation provided and recorded on the comment log sheet</p> <p>In addition, the final draft report had been reviewed externally. JK highlighted that this a normal practice for all CIRIA reports. The purpose of this is not just to 'provide a fresh pairs of eyes' but also to ensure that the report is good enough to be called a CIRIA publication. Although under CIRIA policy JK was not able to reveal the identity of the external reviewer, it was somebody who has been involved in many CIRIA publications.</p> <p>The JIWG acknowledged that there is a lot of interpretation of issues by CIRIA's project team and therefore it was felt that this could lead to challenge and disagreement by others (as discussed at the last JIWG meeting). Therefore in the time remaining it was felt that the best way forward for the JIWG was to acknowledge that the research contractor had prepared this report with best endeavours and with support of a steering group. JK agreed to include a disclaimer at the acknowledgement page of the report. Garry Burdett offered to prepare some draft words and circulate to NH for circulation to the JIWG members to agree.</p> <p>JK agreed that the disclaimer explains the 'process' of how the project was carried out. It is normal practice for CIRIA to acknowledge assistance received during the project on the acknowledgment page. This of course does not necessary mean endorsement from the individuals or organisations. It was suggested to CIRIA that the how comments are considered should also be included in the introduction. JK to consider and report back.</p> <p>JK was asked about how comments were addressed by the research contractor as the log only identifies if the comment was agreed, disagreed or further discussion. JK noted there were in excess of 750 comments received and she had been assured that all comments had been considered. She was questioned whether there was a record of the discussions. AJ (as one of the research contractors) confirmed that recording discussions was not possible but he also agreed with JK that these comments have been carefully considered.</p> <p>There was concern that some comments had not been addressed and had already been flagged previously. JK asked for people to check the log of comments to ensure their comments were contained within it and that the research contractor had satisfactorily addressed the points raised.</p> <p>JK explained to the JIWG that Section 18.2 of the report (a photocopy was circulated) discussed the recommendations and areas found in the CIRIA project where more research/work is needed. However some members of the JIWG still felt that this does not include all the points/areas the JIWG should move forward. As discussed at the last meeting it was hoped that the key areas for further work would be distilled onto 1 to 2 pages.</p> <p>It was felt that this was the opportunity for CIRIA/the RC to provide input into the scope of the CoP by setting out:</p> <ul style="list-style-type: none"> • How the JIWG can take forward/expand upon key issues that the CIRIA RC has addressed, but not in significant/sufficient detail • How the JIWG can take up key issues that the CIRIA RC has NOT addressed. <p>It was suggested to JK that it would be beneficial if this were accompanied by a statement on each issue as to why further work is required.</p>	<p>GB</p> <p>JK</p> <p>ALL</p>
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	<p>JK to discuss with the research contractor to see whether this could be done.</p> <p>SF on behalf of the JIWG agreed to write a short section for CIRIA to include in their document based on the collaborative agreement. JK will talk to 'CIRIA team' to seek approval.</p> <p><u>POST MEETING NOTE</u></p> <p>It was agreed by the 'CIRIA team' that the text will not be necessary as the JIWG work has been mentioned earlier on in the report.</p> <p>JK anticipates that the PSG will sign off the final project report by 21st August. This will be considered pre-publication and circulated to PSG, JIWG and funders. Editorial process will then be undertaken which will take 2-3 months.</p> <p>JK was asked if the PSG plan to meet again, she confirmed that she did not envisage this.</p>	<p>JK</p> <p>SF</p>
<p>5.</p>	<p><u>JIWG Update</u></p> <p><u>Membership & Participation</u></p> <p>As the JIWG is moving into a critical phase it is essential that there is representation from all sectors to ensure all issues are covered by the Code of Practice. It has been noted that the civil engineering and demolition contractors do not seem to be as engaged with the JIWG work as much as others and have not been able to attend the last few JIWG meetings due to work pressures.</p> <p>NH has been asked to speak to John Ferguson representing Balfour Beatty Major Civil Engineering and Barry Menzies representing CECA and National Federation of Demolition Contractors to discuss this and see if it would be appropriate for alternative representatives to attend the meetings as it is essential that these sectors are engaged in the work.</p> <p>It was also suggested, following discussions with the Environment Agency, that the Environmental Services Association (ESA) should be approached to join the JIWG as their members are the main waste contractors and their input into ongoing deliberations on waste classification is important. NH to approach ESA.</p> <p><u>Funding</u></p> <p>The level of funding is unchanged at present with a number of organisations still outstanding on their payments which NH is actively chasing. It is believed that once the specification is finalised then it will be easier to demonstrate how the CoP is developing and hopefully easier to attract further funding.</p> <p><u>Context and strategy for completion</u></p> <p>SF & NH on behalf of the JIWG continue to engage with the key regulators and seek clarification on a number of key points. SF & NH had a teleconference with Environment Agency representatives and Craig Bell of HSE to move forward outstanding issues.</p> <p>Task Group Feedback</p> <p>Task Group D</p> <p>The main issues are the points raised in the UKAS Working Group on Asbestos in Soils minutes. These include:</p>	<p>NH</p> <p>NH</p>

- Asbestos in soil analysis and accreditation of procedure,
- Standardised sampling
- Qualification of laboratory staff
- Quantification/reporting issues including reporting of “trace”
- Proficiency Testing(PT)/QA

All these issue raised by Task Group D and UKAS Working Group will feed into the SCA working group and the development of a blue book method for asbestos in soil that the laboratories will use.

Task Group E – CAR & EPR

Tracy Braithwaite confirmed that the task group met recently and had a very useful discussion. They have identified a number of points that require clarification. Notes of the discussion are currently waiting sign off and then will be circulated to the rest of the JIWG members. TB confirmed that they discussed the CAR regulations and Environmental Permitting Regulations and their applicability to the JIWG work.

TB

Task Group A – Investigation and Monitoring

This group sees the main issues for the CoP to address are ensuring that asbestos is always considered when developing the conceptual site model but not automatically presumed to be on site. There needs to thought put in and evidence from the undertaking of a desk study to indicate that it could be on site.

People need to be cautious but pragmatic in their approach when dealing with investigations on site. Need to be aware that spreading of construction material that contains fragments of asbestos has often occurred historically on site and that this material then gets reworked into the ground e.g. piling mats.

Awareness of recycling/demolition material that can contain asbestos and burial of asbestos on farms should also be covered by the CoP.

The CoP needs to reinforce the importance of accurate conceptual site model development, robust statistical sampling and special surface sampling methods are developed to ensure that pragmatic approaches are taken and large areas of land are not blighted

Task Group C – Waste Management

This group has not yet met, however it was agreed that their input is seen as really important. SF confirmed that dialogue with the EA Waste team is ongoing in relation to mixed waste and WM2 v3 is due out shortly.

There was concern expressed that landowners with legacy liabilities do not know how to deal with potential waste material in the ground. Any historical demolition rubble could be deemed a problem on a site and could potentially be a risk of containing asbestos and therefore Control of Asbestos Regulations 2012 – responsibility of the Duty Holder would apply. How will HSE regulate this? It was agreed that this is most existing brownfield sites and therefore the COP needs to provide guidance that is reasonable and practicable.

It was agreed that site owners should probably assume that asbestos could be present if historical crushed/broken building materials/made ground/old construction materials are present, and therefore a suitable asbestos assessment should be undertaken. There was then discussion who should

carry out this assessment? An asbestos consultant or environmental brownfield consultant.

SCA Blue Book

Hazel Davidson (HD) explained the background to resurrecting the SCA panel and the purpose of the asbestos group is to get agreement between the leading analytical laboratories of the agreed methodology and protocols to follow when analysing and reporting asbestos in soil. At present there is disparity of method and reporting that is causing confusion in the market. The SCA method will be then be made available for CIRIA and JIWG to signpost to. Once the methodology is agreed, it is then hoped that UKAS will provide accreditation for the method. It is anticipated that it will take approximately 12 months to finalise and report the method.

It was noted that the SCA method excludes how the results are reported however guidance can be provided for this.

HD reiterated that the method developed needs to be what industry is wanting and is scientifically robust. Therefore the SCA method needs input from practitioners as well. The SoBRA work on the development of algorithms will feed into this work.

Currently all the major labs are involved in the work however the EA labs are not. Trevor Howard (TH) agreed to go back and discuss internally within the EA.

TH

SOBRA – Risk Assessment Framework

Simon Cole (SC) reported that approximately 80 delegates attended the SoBRA workshop on asbestos in soil held in Birmingham on 27 June. The presentations presented are all now on the SoBRA website. The outcome of the workshop will be a formal report which will include the presentations and the findings of the workshop and will be ready at the end of the year. A number of initiatives have been triggered as a result of the workshop, and a SoBRA sub-group has been created to manage these. One of the initiatives is to collate empirical data on asbestos fibres in air at site investigation and remediation sites across the UK. In addition to this the empirical data presented by RIVM is being re-evaluated. The second initiative involves the development of decision algorithms for various different site situations where people have either occupational exposure to asbestos in soil in relation to their everyday work in land development, or environmental exposures in non-occupational scenarios. The algorithms may be qualitative, semi-qualitative or a combination of both, with the aim that they will feed into the JIWG work. The intention is that the work will be released as a series of position papers. The first two position papers being developed are a decision algorithm for Part 2A investigations of residential gardens and a supporting activity-based sampling method.

It was agreed that there are many different site scenarios that may need to be looked at including planning scenarios. This was agreed but the work is reliant on a lot of goodwill across the SoBRA members and industry.

The issue of topsoil was also raised as at present asbestos is not a contaminant tested for with WRAP protocol or the new British Standard 882. Environmental Health Officers often query this point.

Programme

SF has updated the programme in light of the CIRIA document, ACOP

	<p>consultation, SCA Blue Book work and revision to HSG 248. The current programme shows the JIWG CoP will be published late Autumn 2014.</p> <p>JK asked if CIRIA PSG members will be able to review the draft code of practice as indicated in the joint position paper. NH explained that all the work of the JIWG is open and when it gets to consultation stage this also will be open, so CIRIA's PSG members will be welcome to comment on the draft document along with the rest of industry.</p>	
6.	<p>Update from HSE</p> <p><u>ACOP consultation</u> Craig Bell (CB) confirmed that the ACOP is currently out for consultation and NH had sent a link. Comments are due back on the 30th September.</p> <p>SF noted that the current version of the ACOP does not have a link to the JIWG CoP. CB acknowledged this and requested that SF write a short paragraph and he will ensure reference will be made to the JIWG work. CB explained the purpose of the new ACOP was to amalgamate two ACOPs L127 & L123.– to now be Managing and Working with Asbestos.</p> <p>HSG 248 No progress has been made to updating this document due to other work commitments. It will be updated by the deadline of end of 2014.</p> <p>Definition of asbestos/de minimis for soils and C&D materials A paper outlining the question of trace/de minimis was shared with JIWG where SF had set out a short summary of the key practical issues in relation to the definition of asbestos: specifically where it is considered to be asbestos-containing material in the UK and selected international contexts, for compliance with CAR 2012 and the purposes of classifying materials for the purpose of the UKs environmental permitting regime.</p> <p>CB confirmed that there is no de minimis level in UK. The asbestos regulations require that exposure be eliminated or reduced as far as is reasonably practicable so no limits are set for what constitutes an asbestos containing material. As a result he did not think that HSE will put a level or % in the legislation that is deemed to be acceptable.</p> <p>However it was noted that the ACOP provides guidance in relation to the definition of "asbestos".</p> <p>The Analysts guide states a limit of detection, could this be reported as "trace"?</p> <p>It was acknowledged that if a de minimis level could not be stated by HSE then could a pragmatic level based on practicability of analysis be set?</p> <p>Could <0.0001% be seen as trace, i.e. set at limit of detection on a routine laboratory procedure as pragmatic as it is difficult to screen lower than this as you cannot identify fibres?</p> <p>So anything that can be seen will be >0.001%. Therefore you know asbestos is present and you would need to do something. This would then negate the need for a de minimis level.</p> <p>There is however discrepancies with other legislation such as waste</p>	SF

<p>legislation.</p> <p>The concept of what is considered as “trace” or below could be deemed to not be asbestos but it would be important to decide what control measures are put in place to ensure protection of workers.</p> <p>All were asked to feedback their thoughts on pragmatic solutions to dealing with asbestos which can then be fed back to regulators to consider. Process and procedures would then be put in place subject to risk assessments being carried out.</p> <p>It was noted that other jurisdictions such as Netherlands, Belgium and Australia allows using a method that allows concentrations to be practically measureable against reasonable costs; can this happen in the UK?</p> <p>The discussion was noted by CB, however he felt that there could be a clear problem with setting a “level” this low and he did not believe that HSE would advocate this as a policy decision.</p> <p><u>Quantification</u></p> <p>A paper was circulated that SF had produced summarising the dialogue that he had had with CB regarding the issue of whether or not Reg.21 CAR 2012 (mandatory UKAS accreditation to ISO 17025) applied to the identification of asbestos in all samples of any material.</p> <p>CB confirmed that he had sought views from HSE’s legal advisers regarding accreditation of asbestos “quantification”. He confirmed that HSE’s position is that the only “quantification” required by CAR 2012 related to the measurement of the concentration of fibres in air under reg. 20. However, this requires counting the number of fibres, not calculating the mass of fibre present. This does not relate to bulk materials where there is no requirement for quantification.</p> <p>CAR 2012 requires accreditation for analysis to determine the presence of asbestos. But CAR 2012 does not require accreditation for any work to quantify the amount of asbestos present in a material for example, quantify the percentage of asbestos that may be present in a sample.</p> <p>Industry can decide with UKAS that it wants accreditation but this would be an industry standard and not a “legal” one and therefore HSE could not take any related enforcement action.</p> <p>HD confirmed that EIC had written to DWP Minister outlining the inconsistency of approach by laboratories relating to quantification of asbestos in bulk samples and they recently had a response. NH was asked to circulate the Minister’s response to the JIWG members.</p> <p>HD explained that UKAS had been preventing some accredited labs from undertaking quantification of asbestos in bulk samples, however some labs that are not accredited have been undertaking bulk analysis. It is understood that UKAS has also sought clarification from HSE on this point.</p> <p>ALG 02/08</p> <p>CB confirmed that ALG 02/08 had officially been withdrawn. SF asked what was the general awareness that it had been withdrawn as it is believed some recycling companies are still quoting 0.1% asbestos is an acceptable level in recycled aggregates.</p>	<p>ALL</p> <p>NH</p>
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	<p>SF confirmed that he had informed the LinkedIn group that it had been withdrawn. CB will contact ALU and ask how withdrawal of the memo will be explained on the ALG memo webpage. Trevor Howard (TH) confirmed that he would inform his colleagues within the EA virtual asbestos team also.</p>	CB & TH
7.	<p>Update from Environment Agency Trevor Howard (TH) confirmed that SF and NH participated in a telecon with two Environment Agency colleagues to discuss regulatory issues.</p> <p><u>Revised WM2 – version 3</u> TH confirmed that WM2 v3 will be issued on August 1st 2013. It will have a phased implementation for different sectors.</p> <p>TH is hoping that he will be able to encourage other colleagues to attend the JIWG depending on the areas that are being discussed as there are currently 10 agency teams that asbestos affects. TH will remain the main point of contact.</p> <p><u>Review of hazardous waste classification/regulation applied to asbestos</u> TH is awaiting a response to the paper that SF prepared for the last JIWG meeting on hazardous waste classification/regulations that are applied to asbestos. SF flagged a number of inconsistencies that he hoped to get clarification on. TH to follow up and ask for a response to queries raised.</p> <p>It is important to try and finalise how the different legislative regimes inter-relate from a waste and permitting angle. SF started this process with a previous EA representative but this has not progressed. NH to circulate to the JIWG SF initial thoughts for the JIWG to provide their thoughts.</p>	<p>TH</p> <p>NH ALL</p>
8.	<p>Update from UKAS UKAS circulated the minutes from the first UKAS meeting for asbestos in soil. Mark Wagstaff (MW) explained that the Asbestos Technical Advisory Committee (TAC) is planning to meet on the 11th October 2013 to discuss the revision of Lab 30 – Asbestos Sampling and Testing and identify weaknesses in the document. It does not cover soil sampling. TAC will provide technical guidance to UKAS and it is useful that a number of individuals on the TAC are also involved in the JIWG. TAC will ensure consistency of approach but there are no soil related consultancy individual currently present on TAC which needs to be changed. MW asked for 1-2 additional asbestos “soil” consultants to be put forward from the JIWG. Once Lab 30 has been amended, it will be issued for consultation and finalised end of the year early next year. Lab 30 update will not take into consideration changes to HSG 248.</p> <p>Members of the JIWG were encouraged to contact NH if they were interested in participating on the TAC.</p>	ALL
9.	<p>BOHS No update was available as Colette Willoughby was unable to attend.</p>	
10.	<p>REACH: DEFRA SF and NH confirmed that they have been able to make contact with the REACH team in Defra and hope to have a regulatory meeting with them in October with DfT, EA and HSE. SF confirmed that he had passed the paper on REACH and Transport of Material Contaminated by Asbestos for their consideration.</p>	

11.	<p>CDG/ADR:DfT</p> <p>SF and NH confirmed that they have been able to make contact with DfT and the person responsible for transportation of dangerous goods. We hope to have a regulatory meeting with them in October with DfT, EA and HSE. SF confirmed that he had passed the paper on REACH and Transport of Material Contaminated by Asbestos for their consideration.</p>	
12.	<p>Further Research</p> <p><u>SAGTA</u></p> <p>NH was asked to contact SAGTA to obtain clarification on what further research they planned to undertake with regard to asbestos. NH to report back.</p> <p><u>Background Levels in Soil and Air</u></p> <p>As part of the JIWG work, SF confirmed that a request had been put to Defra to fund a national background study of asbestos in soil and air study to help inform the JIWG work, this is currently being considered.</p> <p>SoBRA confirmed that as a group they are also trying to look at the practical realities of what RIVM developed in the Netherlands and whether this could be undertaken to apply to the UK.</p> <p>TH was asked whether he was able to access air sample results from licensed landfill sites that accept asbestos, as monitoring is a requirement of their permit. This information could help although it is very localised. TH will make enquiries and report back.</p> <p>CB felt that it is really important to try and gather up air monitoring data around sites that are monitoring for asbestos during site works to help provide evidence to confirm that only low levels of asbestos fibres are released if good site procedures are followed.</p>	<p>NH</p> <p>TH</p>
13.	<p>AOB</p> <p>The JIWG was asked what information was available about the rate of degradation of asbestos containing materials? It was believed that BRE previously had looked at the durability of asbestos cement products but it was highly environmentally dependent. It was believed that there is a lot of research in this area.</p>	