ASBESTOS IN SOIL, MADE GROUND AND CONSTRUCTION AND DEMOLITION MATERIALS

Joint Industry Working Group Meeting MEETING No. 5 – Dundas & Wilson LLP Office, London

8th May 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
Colette Willoughby BOHS
Graham Winter EA

George Kowalczyk Public Health England

Mark Wagstaff UKAS (replacing George Sanders)

Garry Burdett HSL

Barry Menzies CECA and NFDC

David Wood EIC Environmental Laboratories Working

Group

Apologies

Rachael Adams MoD
Joanne Kwan CIRIA
Richard Boyle HCA
Tim Elliott RICS

John Ferguson Balfour Beatty Major Civil Engineering

Agenda

- 1. Housekeeping
- 2. Welcome, apologies and introductions
- 3. Previous minutes
- 4. CIRIA update:
 - a. Round table discussion on CIRIA "Guide to managing and understanding the risks of asbestos in soil and made ground"
- 5. JIWG update:
 - a. Round table discussion on proposed Industry Code of Practice on Asbestos in Soil and C&D Materials
 - b. Membership and participation
 - c. Funding
 - d. Context and strategy for completion:
 - i. CIRIA Guide
 - ii. existing/forthcoming legislation
 - iii. revised guidance
 - iv. regulatory clarification
 - v. preliminary task group outputs:
 - i. risk assessment framework
 - ii. analytical methodology
 - e. Scope and structure
 - f. Compilation and consultation
 - g. Programme
- 6. Update from HSE:
 - a. ACOP: revision, consultation and re-issue programme

- b. HSG 248: revision, consultation and re-issue programme
- c. Definition of asbestos/de minimis for soils and C&D materialsd. Quantification

- e. International perspectivesf. ALG 02/08 withdrawal/re-issue
- 7. Update from Environment Agency:
 - a. Revised technical guidance on waste "rWM2"
 - b. Review of (hazardous) waste classification/regulation applied to asbestos
 - c. Review of environmental permitting
 - d. International perspectives
- 8. Update from UKAS:
 - a. Lab 30 revision, consultation and re-issue programme
 - b. Key industry issues (see separate paper)
 - c. Interface with HSG248/JIWG work
- 9. Update from BOHS:
 - a. Development of training modules
- 10. REACH: DEFRA 11. CDG/ADR: DfT
- 12. AOB

No.	DISCUSSION	ACTION
1.	HOUSE KEEPING Nicola Harries (NH) provided the housekeeping and thanked Dundas and Wilson LLP for hosting the meeting.	
2.	WELCOME, APOLOGIES and INTRODUCTIONS The chair Steve Forster (SF) welcomed all to the meeting and thanked people for making the time available to meet. Apologies had been received from Rachael Adams, John Ferguson, Richard Boyle, Joanne Kwan and Tim Elliott.	
	SF welcomed Graham Winter (GW), Dave Woods (DW) and Mark Wagstaff (MW) who had not attended the JIWG before. GW was attending on behalf of the Environment Agency – Waste Team, he engages with the demolition, construction sectors and liaises with WRAP regarding their waste protocols. DW is representing the EIC Environmental Laboratories Working Group and MW is representing UKAS and was standing in for George Sanders who is replacing Kate Brooks who has now left UKAS.	
3.	It was agreed that all actions had been completed or would be addressed through the meeting; however there was an error in the previous minutes item 4 which should have read: "There is a general guide that 0.001%w/w (0.01g/kg)". NH to amend and upload an updated version to the JIWG webpage.	CL:AIRE
	Outstanding Agenda Items CL:AIRE to prepare a draft press release for sign off. CL:AIRE had not completed this action as it was felt that a press release would be better to be issued when the final scope had been finalised and the programme agreed.	CL:AIRE
4.	CIRIA Update Unfortunately Joanne Kwan could not be present at the meeting to present on behalf of CIRIA, therefore Alan Jones who is a co-author of the CIRIA document "Guide to managing and understanding the risks of asbestos in soil and in brownfield sites" agreed to answer questions where possible.	
	It was confirmed that the document is now at an advanced stage of drafting and a final draft version is due for circulation soon, however the exact date of the final version for circulation is yet unknown. The research contractors have carefully considered all comments that have been made on the report and all comments have been (or are being) carefully considered. It was acknowledged that a large amount of time had been spent on the	

report and that it is longer than it was originally planned, but the length reflects the issues that the Project Steering Group (PSG) requested should be included in the report. The order of the report may still change, but this still needs to be confirmed.

The legislation section has been reviewed extensively by a senior barrister who was involved in many of the landmark asbestos legal cases. Civil Liabilities is now presented which it is believed to be the first time for this to occur in relation to asbestos.

How will this document link with the JIWG Asbestos in Soil document as the joint statement had originally stated? Would it be possible for the CIRIA authors to distil some keys points onto 1-2 pages of the key points that they feel the JIWG should carry forward in their work? Alan Jones agreed to talk to CIRIA and LQM about this and will report back.

ΑJ

The JIWG felt that it was important that a short sharp appraisal of the key issues would ensure that the JIWG could take the baton on.

ТВ

Tracy Braithwaite (TB) confirmed that SAGTA has also compiled a list of activities that need to be taken forward in light of the CIRIA document. TB agreed to share this with JIWG. Once signed off by SAGTA.

As the CIRIA guide has been written by a consortium, the responses to comments will be the contractor's assessment. It was recognised that the CIRIA guide will reflect the contractor's views with comments from an industry wide steering group (which includes several of the members of the JIWG, HSE and the EA). However there may still be areas where the JIWG document may disagree. This is inevitable and unavoidable.

HSE state that they have some reservations currently in the way the CIRIA document has been written with reference to the Approved Code of Practice (ACOP). It is important to state that the ACOP was never written for remediation of ground and therefore it should not be referred that it could be applicable. This creates confusion.

HSE also noted that the references in the CIRIA document to the ACOP asbestos training awareness and course content is referring to training that is specific to asbestos in buildings so is not directly applicable to asbestos in soil. There may be some appropriate parts for soil but not all. This should be made clearer in the CIRIA document.

HSE confirmed that the updated ACOP plans to refer to the JIWG work when dealing with remediation of soil and guidance.

It was agreed that the JIWG had input as much as possible in the timeframe that had been permitted. The format that the CIRIA guide had been presented and the length of the document made it hard to review in the timeframe. Each time the JIWG were asked to comment it coincided with main holidays such as Christmas and Easter which made things very difficult.

NH was requested to go back to CIRIA to ask when the document will be made available for final review.

NΗ

SAGTA confirmed that there are some issues that the CIRIA guide has raised that SAGTA are looking to address which are outside of the project's remit such as civil liabilities.

HSE stated that the government is changing the law on civil liabilities and the

health and safety link will be broken. HSE to send through details if available. HSE has been part of the CIRIA PSG and comments to this effect have not been raised previously.

HSE

The JIWG asked AJ if they were able to provide a distillation of issues that the CIRIA document had not dealt with because they were either too contentious, irresolvable at this stage or out of the projects remit. AJ confirmed that he would discuss with CIRIA and the other authors.

HSL felt there were 3 major areas in the CIRIA report that the JIWG may have to go against as they will be conflicting with what the JIWG is trying to achieve:

 CIRIA document defaults to requiring a detailed quantitative analytical and risk modelling exercise to occur. HSL would prefer that there is always an opportunity on sites with little or no identifiable asbestos to be able to exit the process early. There needs to be a more pragmatic approach for low amounts of asbestos that you have to undertake a full quantitative risk assessment.

AJ explained that this was not the intention of the CIRIA report but as there is no de minimis level for asbestos and taking civil liabilities into consideration risk assessment may be the minimum. AJ felt that it would be difficult to undertake a simple appraisal without undertaking a risk assessment because of these issues. Could demonstration of practicability in relation to Health and Safety not be a way forward? There were comments from others that the legal liabilities in the UK are different from other countries such that setting a de minimis level of exposure may be easy in some other countries but not in the UK. AJ to feedback to CIRIA and the other authors.

AJ

2. HSL reported that the extrapolation of occupational exposure data was recently reviewed by an independent committee of experts (WATCH). They concluded that extrapolations or more than 1 to 2 orders of magnitude below the occupational data (cumulative exposures down to ~0.5 f/ml.years) may not be reliable or scientifically robust and has not been validated.

The fact that there are uncertainties in extrapolation to lower levels of exposure than those on which the models are based is fully recognised and discussed in the CIRIA guide. However, there is extensive human epidemiological evidence for asbestos and it is necessary to make best use of that information in assessing potential risk. It was noted by others that estimation of potential exposure and derivation of consequent risk to health is the conventional approach for brownfield sites.

3. Extrapolating from the amount of hazardous asbestos in soil is not a robust method to indicate the potential risk from airborne asbestos fibres. The potential for the fibres becoming airborne and exposure taking place is the key information for any risk assessment and this needs to be based on measurements of airborne asbestos concentrations (preferably both indoors and outdoors when dry).

Some JIWG members noted that Local Authorities are expressing concerns about asbestos in soils that are presently capped but may become exposed with a change of permitted use of the land. The hazard in soils that may become available has to be assessed.

AJ explained that it is not always possible or acceptable to undertake monitoring of air concentrations under the potential conditions when fibres may become released, as discussed in the CIRIA guide.

There is scientific evidence overseas that demonstrate the low risk of fibres in

soil and then becoming airborne. RIVM (Netherlands) have demonstrated that there is little hazard if asbestos is in the soil; it is when it becomes airborne there are problems. AJ commented that the evidence from RIVM is quoted in the CIRIA guide and it shows that concentrations in air do increase with asbestos content in soils on real sites.

TB has spoken with the Nuclear Industries Group Land Quality and members of SAGTA regarding the collation of on-site monitoring data that maybe available to identify the amount of airborne asbestos that maybe available from on site construction works. The aim is to then expand the project to undertake additional sampling, and activity based monitoring to again ascertain the reality of the pathway during construction works in the UK. The draft project scope is currently with SAGTA members for review.

Data was presented to CIRIA from SAGTA to support the guide, however CIRIA rejected the data as the project advised that it felt that the data was not appropriate for the scope of the study. Other data was unfortunately not able to be released within the timescales of the project for security reasons.

Therefore if asbestos is detected then do something about it, but how much effort is required if asbestos is not expected and not been identified? Several of those present confirmed that asbestos is detected in a high proportion of soil samples sent to laboratories. DW suggested that it may be nearer to 25% of samples than higher percentages (over 50%) that have been mentioned in public presentations previously. There were examples given (from several present) of materials being put through crushers even though ACMs were present. Exposure was recognised as likely when the resultant crushed materials were tipped. It was suggested that this may occur with the less reputable operators. AJ suggested that it may be the blue chip companies with good standards who are sued when and if mesothelioma arise in the future because they are the employer who is still in business and with traceable insurance. Site ground work may be the one area where there are dusts generated from material that include degraded ACMs and exposure whereas HSE guidance specifies precautions to prevent exposure in all other construction work.

The likely risks from low exposures are also seen in cases that go to Court where mesothelioma are attributed to exposures that would be described as very light. Failure to prevent large numbers of ground workers being exposed to asbestos even at low levels will be likely to lead to incidence of mesothelioma in the future. The industry may also be deemed liable if employees also have unrecognised exposure to asbestos elsewhere (e.g. while self employed as a joiner). Note that 1 in 10 of joiners born in the 1940s are predicted to die of asbestos related disease due to exposures in the 1960s /1970s.

If you undertake work following what is reasonably practicable i.e. with air monitoring does this not start to create an automatic de minimis. This was felt better guidance rather than extrapolating. It was felt that CIRIA may be giving the wrong impression. The CIRIA guide covers when air monitoring is appropriate or necessary, and the lines of evidence that may be needed which include extrapolation of likely dust release.

AJ to feedback the discussion.

POST MEETING NOTE

Joanne Kwan confirmed that their research contractor is now preparing the final draft report. As in other CIRIA projects, the Project Steering

ΑJ

Group will have 10 days to make comments after this final draft is circulated before CIRIA signs this project off. CIRIA understands this is a very tight but as the JIWG members have seen several versions of the reports, it should be sufficient if JIWG members concentrate on the changes.

5. JIWG UPDATE

The JIWG Asbestos in Soil Code of Practice can start in earnest now the CIRIA document is near completion. There was unanimous support that all parties were still committed to moving the project forward. SF confirmed that membership is not likely to change at present but if there was a requirement for additional members (like EIC Environmental Laboratories Working Group) requests would go out as the project progresses.

NH confirmed that the funding levels had not changed and there were still some members that had pledged their support financially but still had not provided the monies. It was hoped that additional funding would become available as the full scope of the project is finalised.

It was agreed that the JIWG document still needs to dovetail with the publication of the HSE's publication HSG 248 and the revised ACoP.

It was agreed that the best way forward to deliver the JIWG CoP is to continue to build on the work that has been undertaken by working closely with the regulators on the key aspects that need clarification which will then feed into the overall regulatory framework.

A skeleton of the JIWG CoP needs to be produced before engagement of authors to help write different chapters. Therefore in light of the delays that have occurred with the preparation of the CIRIA guide and what is known about the delivery of the ACoP and revised HSG 248, SF agreed to prepare a revised programme to demonstrate to the wider industry when realistically can the JIWG CoP be produced. SF will work backwards from May 2014 to see if this is possible. It is really important now to set limits and understand what is achievable.

It was agreed that the JIWG was always going to be guidance, so good practice must prevail. There is going to be elements of pragmatic judgment trying to control exposure, ensuring the controls in place are reasonably practical.

It was agreed that the work groups should be revisited to work together and to develop skeleton frameworks in the following areas:

- A. Investigation & monitoring Seamus Lefroy-Brookes,
- B. Risk assessment Simon Cole,
- C. Waste management Barry Menzies,
- D. Laboratory analysis Rob Blackburn and
- E. Regulatory issues (CAR & EPR) Tracy Braithwaite.

The leaders of these groups will co-ordinate with the members of their groups to identify what the JIWG CoP needs to address and develop draft frameworks to be presented to the rest of the JIWG. Some groups had started this works such as Group B which will be used for the upcoming SoBRA workshop.

SoBRA's workshop is on the 27th June to work with industry to feed into the risk assessment skeleton framework addressing the issues that need to be

SF

addressed by the framework and to try and come up with some solutions that can then be built on within the JIWG. It was felt that Martin Gibson & George Sanders should also join the Laboratory Analysis group. NH was requested to re-circulate the membership of the groups and provide CL:AIRE contact details Trevor Howard requested to be part of the EPR & Waste Group and Garry Burdett requested to be part of the risk assessment group. **Analytical Methodology** Dave Wood of the EIC Environmental Laboratories Working Group has been undertaking some independent research looking at reproducibility of asbestos laboratory methods with 6 of the leading laboratories to try and standardise the methodology and level of performance. If this becomes a standard methodology, then they can work with UKAS to accredit the process which can in turn develop a cradle to grave scenario for sampling on sites, laboratory testing and reporting which can then feed into the JIWG CoP. It was suggested that the work of the Environmental Laboratories Working Group in this area be combined with the on-going development of the CoP. DW to keep the JIWG informed of progress. DW 6. UPDATE FROM HSE ON ASBESTOS-RELATED DOCUMENTS AND **OTHER ACTIVITIES ACOP** HSE are currently reviewing the ACOP and looking at ways to present the information in a clearer way. It is still anticipated to be reissued at the end of the year with consultation 9/7/13 - 30/9/13. NH was asked to forward CB the contact details of JIWG members to ensure CL:AIRE that they are added to the consultation list. There are not going to be significant changes with no references to asbestos in soil. It will signpost the work of the JIWG for this. The document will be freely available in December as PDF only with publishable version in the new year but at a small cost. **HSG 248** Gary Burdett (GB) confirmed that HSG 248 has not moved forward as they are waiting on HSE to write a number of chapters. No further meetings have been scheduled. CB will enquire internally regarding progress. CB Quantification Currently in CAR 2012 there is a mismatch on mandatory requirement for UKAS accreditation for quantification of asbestos in a sample. This needs to be clarified. CB & SF CB asked SF to provide some paragraphs together to identify the issues and what needs clarification and he will seek legal opinion.

International Perspectives

CB brought to the attention of the JIWG that Members of the European Parliament brought a paper forward for discussion that there was not enough legislation on asbestos. There was unanimous support for this 558 to 51 votes, however at present it is unsure if anything will proceed from this paper. CB agreed to forward details for NH to circulate.

CB & CL:AIRE

It appeared to be a long wish list of what would be good to have but did include training of landfill operators and development of industry and stakeholders guidance.

ALG 02/08

CB thanked SF for flagging the updated ALG 02/08 memo as he was not aware that it had been updated in March 2013. It appears that the only change was the reference to the updated CAR regulations. SF had circulated a highlighted version of the document where there were a number of inconsistencies and inaccuracies in the memo. CB agreed to contact the team leader in the ALU to discuss taking the memo down off the website whilst it is reviewed.

CB

7. <u>UPDATE FROM ENVIRONMENT AGENCY</u>

Trevor Howard (TH) confirmed the imminent release of rWM2. This will be out in the next 6-8 weeks. This was reissued to reflect the change in legislation. There are a number of case studies as an annex that are there to help classify waste materials and some include asbestos fibres and asbestos containing materials. The EA now acknowledges industry concerns that the application of the guidance could have negative impacts on the development and waste sector after a telephone conversation with JIWG members and EA waste team members. Therefore they have agreed to work together to explore options to develop a more pragmatic approach to regulation in this area. The JIWG has produced a statement in agreement with the EA to explain this to industry and to try and allay further frustration and issues that the industry has.

Final wording of the JIWG statement needs to be signed off by the EA. On sign off it will be circulated to JIWG members and uploaded onto the website and LINK-IN pages.

TH & CL:AIRE

JIWG and EA plan to continue to have regular meetings to move issues forward.

Graham Winter (GW) confirmed that the EA will be undertaking auditing of construction industry waste streams by visiting and inspecting sites to gather data intelligence and knowledge how waste is being segregated. They will be focussing on EA permitted and exempt sites. This will be starting in June 2013 ending in September 2013.

SF asked whether the EA will also be liaising with the Local Authorities (LAs) on this work as LAs also permit activities. GW will liaise with his EA colleagues to ascertain if this is also going to happen.

The intelligence gathered will be useful to understand what the industry is actually doing, what is permissible as it is believed that there is a conflict. It will also help to identify what is best practice and can feed this into the JIWG.

SF circulated a paper "Waste & Environmental Permitting - Issues for

Consideration by Environment Agency and Defra". This paper highlighted the different relevant guidance on permits and exemptions and the inconsistencies that exist. The JIWG need help from the EA and Defra to navigate a route through. GW confirmed that he will circulate this paper to his other colleagues.

CL:AIRE & GW

Can the EA look at how things could be aligned and reduce duplication? NH was asked to email a copy of the paper for the EA to consider internally. It perhaps would be useful to bring in others from the JIWG Waste subgroup to assist in the discussions.

CL:AIRE

NH to email for volunteers from the JIWG Waste sub group to work with the EA.

CL:AIRE

The discussion then moved to International Perspectives and how other countries deal with asbestos fibres and asbestos containing materials. NH has heard from colleagues in Netherlands and we are aware that the Australia has now developed a robust framework for dealing with construction and demolition materials that may contain asbestos and asbestos containing materials. Could we translate this system to UK? NH to send the link for all to read about.

CL:AIRE

The main issue is to agree what "trace" means and translates into when in bulk materials. SF agreed to draft some words that can then be circulated and discussed.

SF

8. UPDATE FROM UKAS

SF circulated a paper "Analytical Methodology – Issues for Discussion". This paper highlighted a number of issues that prompted a round table discussion

Dave Wood (DW) confirmed that there is great concern about inconsistency of testing methods across the main laboratories undertaking asbestos analysis that through the EIC Laboratories working group they have written to UKAS, DEFRA, DWP and HSE expressing their concern.

Mark Wagstaff (MW) explained that UKAS are not responsible to instruct laboratories to implement a certain method, they are there to assess against a method. Any policy decisions need to go through a technical advisory group. It is up to industry to come up with the method that is reproducible and cost effective.

MW confirmed that Lab 30 method is being revised internally initially and then it will be externally reviewed and it is hoped it will be available at the end of the year but to note it does not take account of HSG 248. The Lab 30 method does not include for asbestos in soil. There will need to be separate accreditation for asbestos in soil.

MW confirmed that there have been a number of staff changes recently. There was confirmation that there needs to be standardised terminology in information produced by UKAS, however again it is not down to UKAS to define terminology it is up to industry and then UKAS will adopt this.

It was felt that UKAS should withdraw Bulletin 1 as it caused confusion. MW will feed concerns back into UKAS and report back to JIWG.

MW

UKAS are keen to work with the JIWG and help where it can.

MW confirmed that the draft minutes from the recent meeting to discuss

	T	T
	asbestos in soils will be circulated imminently.	
9.	UPDATE FROM BOHS ON DEVELOPMENT OF TRAINING MODULES	
	Colette Willoughby (CW) confirmed that there has been no progress since the last meeting. They are keen to work with the JIWG on this work.	
10.	REACH:DEFRA	
	SF and NH confirmed that there has been no progress liaising with Defra and the REACH team. NH still making enquiries within other departments within Defra.	CL:AIRE
11.	CDG/ADR:DfT	
	SF confirmed that no progress has been made to contacting the relevant people that deal with asbestos in DfT.	
12.	AOB	
	SAGTA confirmed that they are keen to support further research about background soil and air concentrations of asbestos and what levels of asbestos are on site. It was felt that this would be very useful and JIWG members would be happy to help scope a piece of research that would help what the JIWG are trying to achieve.	
	Health Protection England and Health and Safety Laboratory reminded SAGTA that they already are aware of some research that has been carried out in this area and therefore are happy to signpost.	GK & GB
13.	NEXT MEETING	
	NH will circulate some suggested dates using Doodle for the next meeting that ideally should be in July but before the main schools break up.	CL:AIRE