

# ASBESTOS IN SOIL, MADE GROUND AND CONSTRUCTION WASTE

## Joint Industry Working Group Meeting with HSE and EA

### MEETING No. 4 – Teleconference

16<sup>th</sup> July 2013

FINAL

#### Attendees

NAME	REPRESENTING
Steve Forster – Chair of JIWG	EIC
Nicola Harries - Secretariat	CL:AIRE
Tanya Bowell	EA
Craig Bell	HSE
Howard Leberman	EA

#### Agenda

1. Waste Classification
  - a. Revised guidance on hazardous waste - WM2 V3, 2013
2. Recycling of Asbestos Contaminated Soil and C&D Materials
  - a. JIWG discussion paper on waste and permitting issues
  - b. Australian guidance
3. REACH update
  - a. Meeting/contact with DEFRA
  - b. JIWG discussion paper on REACH issues
4. CDG/ADR update
  - a. Meeting/contact with DfT
  - b. JIWG discussion paper on transport issues
5. HSE Guidance on Demolition – Dealing with Buildings that Contain Asbestos - ALG 02/08
  - a. Update on ALG 02/08
  - b. Meeting/contact with ALU
6. HSE Guidance on Worker Protection from Asbestos in Soils – HSG 248 Annex (CFM WG2 Task Group)
  - a. Update on progress
7. Laboratory analysis
  - a. SCA Blue Book method
  - b. CAR 2012 definition of asbestos/HSG248 definition of 'trace'/*de minimis*
  - c. HSE position on quantification and ISO17025
8. UK background concentrations – air/soil
9. AOB
10. Next Meeting

No.	DISCUSSION	ACTION
	<p><b><u>Introductions &amp; Apologies</u></b></p> <p>Steve Forster (SF) chair of the JIWG welcomed Tanya Bowell (TB) and Howard Leberman (HL) from the Environment Agency who were new to the JIWG regulatory meetings. Apologies were received from Trevor Howard (EA). SF provided a brief update on the purpose of the meetings to TB &amp; HL. TB explained that she worked in the waste streams (hazardous waste) and HL worked in the permitting part of Environment and Business within the Environment Agency.</p>	
1.	<p>SF explained that the JIWG is keen to try and find a way to prevent so much soil and construction/demolition arisings that contain low levels of asbestos from being sent to landfill as hazardous waste. The JIWG is also looking at mechanisms by which material that might otherwise be classed as “hazardous” might be deemed suitable for recycling and reuse if risk assessed appropriately.</p> <p><b>Waste Classification</b></p> <p>TB confirmed that WM2 v3 is due to be published on 1<sup>st</sup> August and will be applied on 1 September 2013 with a few exceptions (as detailed on the EA website). TB expected that the section that affects soil and construction waste with respect to asbestos will be immediately active as the regulatory position has not changed.</p> <p>Example 17 of WM2 v3 identifies that <i>“if waste contains fibres that are free and dispersed then the waste will be hazardous if the waste as a whole contains 0.1% or more asbestos”</i>.</p> <p>Example 17 also states that <i>“Where the waste contains identifiable pieces of asbestos (i.e. any particle of a size that can be identified as potentially being asbestos by a competent person if examined by the naked eye), then the asbestos must be assessed separately. The waste is hazardous if the concentration of asbestos in the pieces alone is 0.1%. The waste is regarded as a mixed waste ... and classified accordingly ”</i></p> <p>SF explained that the difficulty is that often site won material that contains &gt;0.1% asbestos (by this latter definition) could potentially be beneficially reused on sites but that a ‘hazardous’ classification may frustrate this.</p> <p>It was also discussed about when material is classified as a waste. The presence of asbestos in soil does not automatically make that material waste. If a site specific risk assessment has been carried out that shows that there is no unacceptable risk to future users of the land then the soil may be able to remain in place, or be used elsewhere on the same site.</p> <p>TB noted that an assessment on whether the material is or is not waste should first be undertaken. Only if it is waste, does the waste require classification.</p> <p>SF noted that, currently, large volumes of waste material arising on brownfield development sites typically contain asbestos fibres and Asbestos Containing Material (ACM) fragments dispersed in it at low levels due to historical legacy contamination from poor demolition practice or non-intentional spreading across sites. This may have occurred prior to the waste mixing ban. SF questioned whether this material should be deemed hazardous where there was no</p>	

deliberate mixing of wastes and the absolute concentration of asbestos fibres is actually below 0.1% w/w?

SF questioned whether it would be possible to map out a pragmatic solution to keep material out of the hazardous waste stream, subject to checks and balances designed to prevent the deliberate mixing of materials to reduce the waste classification?

HL explained it would be very difficult to separate out recently contaminated material from historical legacy material. If there is asbestos that is visible this should be separated out. How visible?

SF explained that asbestos fibres cannot always be seen as it can be smeared e.g. by clay. The Example 17 test - "*any particle of a size that can be identified as potentially being asbestos by a competent person if examined by the naked eye*" is quite subjective.

SF stated that current guidance on waste classification, therefore, relies on a robust analytical quantitative test to determine the concentration of free dispersed asbestos fibres on the one hand and a basic "if it contains visible pieces of potential ACM then the entire waste load is hazardous" if the amount of asbestos in the ACMs is >0.1%. In practice, all ACMs have more than 0.1% w/w asbestos fibre, so this means that all waste material with any visible ACMs is deemed to be hazardous.

TB explained that if the waste contains visible pieces of ACM, then the waste should be considered effectively as two distinct wastes. Each separate waste must be separately assessed, described and coded. There a number of commonly available options for dealing with visible pieces of asbestos (e.g. hand picking) and with removal of the asbestos, the remainder of the waste can be assessed in its own right.

SF pointed out that it is believed that the current approach to waste coding appears to be inconsistent with the objectives of the List of Waste (LoW) and accepted waste classification approaches.

The EA noted that hazardous asbestos wastes can arise from a variety of sources and therefore may be described under a number of List of Waste (LoW) codes. Post-meeting note: The most likely examples of hazardous asbestos wastes are set out below.

Asbestos waste source	Relevant Hazardous LoW Codes and Descriptions
Asbestos contaminated soil or rubble	17 05 03* soil or stones containing dangerous substances 17 09 03* other construction and demolition wastes (including mixed wastes) containing dangerous substances
Other asbestos wastes	15 01 11* metallic packaging containing a dangerous solid porous matrix (for example asbestos) including empty pressure containers 16 02 12* discarded equipment containing asbestos 16 02 15* hazardous components removed from discarded equipment
Asbestos-lined brake shoes	16 01 11* brake pads containing asbestos
Asbestos – fibrous and insulation products	17 06 01* insulation materials containing asbestos
Asbestos – bonded or corrugated	17 06 05* construction materials containing asbestos

Chapter 17 of the LoW relates to "CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES)".

SF had previously suggested that, logically, a contaminated site from which material is produced, e.g. soil and stones containing dangerous substances should/must be classified as 17 05 03\*, as there is a specific code for the parent matrix material which contains asbestos (the dangerous substances).

Perhaps the use of 17 06 05\* or 17 06 01\* shoehorns ACM debris in mixed material into the wrong category of waste as unexcavated material containing ACMs is not a "construction material" unlike asbestos insulation, asbestos sheets or similar products that have been installed in and then removed from a building.

Likewise, 17 01 06\* is, perhaps, a better and more apt description for example of mixtures of, or separate fractions of concrete, bricks, tiles and ceramics containing dangerous substances, i.e. asbestos at >0.1%.

Where the rWM2 states "*the waste as a whole containing 0.1% or more asbestos*" what is the size of sample? In Australia and Netherlands they base their acceptable levels on analytical techniques.

TB noted that the new WM2 suite of documents includes Appendix D, a supplement providing recommended practice for Waste Sampling, which is based on the waste standard and supporting technical reports. Practical guidance is needed for laboratories as well who may be looking for "free fibres". How much time should laboratories take looking for free fibres? If you look hard enough and long enough there is a strong chance you would find asbestos.

HL stated that it is really important that the EA safeguard against further

	<p>contamination with asbestos as larger pieces will with time get broken down through processing.</p> <p>For the JIWG CoP it needs to develop an agreed pragmatic approach to provide good practice guidance for industry to follow when processing soil and construction waste that may or may not contain asbestos.</p> <p>TB stated that the EA have already given the JIWG the green light to explore a pragmatic approach and has committed to consider any proposals.</p> <p>Craig Bell suggested if hand picking was the preferred route initially when processing land that was contaminated by asbestos, the HSE would need to be satisfied that workers are not put at unreasonable risk and that control measures were practical. Evidence to demonstrate how risks are managed in relation to people's exposure would be very important with real examples.</p> <p>It is believed that SAGTA members may be generating such evidence as they are monitoring around their sites whilst undertaking site activities. CB explained that it would be extremely helpful for evidence to be gathered from different operations and how industry are currently managing the asbestos problems and controlling the risks. NH to make enquiries.</p>	<p>SF</p> <p>NH</p>
<p><b>2.</b></p>	<p><b>Recycling of Asbestos Contaminated Soil and C&amp;D Materials</b></p> <p>HL is seeking clarification to the points raised in the issues paper on waste and environmental permitting. Currently it is felt that there is differing advice provided by regulators. There is an onus on operators to undertake a monitoring regime, but insufficient detail is provided on the number and types of samples that are acceptable and what type of material it has come from. Should this be tightened up? Could this be part of the planning conditions?</p> <p>SF explained that Western Australia has a pragmatic route for addressing construction and demolition waste recycling; perhaps we could directly adopt their principles along with the EA exemptions?</p> <p>CB suggested that EA/Defra and HSE/DWP could be in a difficult position if the JIWG CoP develops more stringent controls than are identified in law as this could be seen as a burden on business. If industry guidance goes beyond UK law, it will be difficult for HSE to approve and endorse.</p> <p>SF agreed to share his initial flow chart to show how the different regulatory regimes interact.</p>	<p>SF</p>
<p><b>3 &amp; 4</b></p>	<p><b>REACH &amp; CDG/ADR Update</b></p> <p>SF confirmed that the JIWG has now obtained contacts within Defra REACH team and DfT SF has prepared a paper identifying the key regulatory issues that need clarification on which they are currently considering. We are hopeful that they will join the next regulators meeting.</p>	
<p><b>5.</b></p>	<p><b>HSE Guidance on Demolition – ALG 02/08</b></p> <p>CB confirmed that Asbestos Liaison Group (ALG) 02/08 has been removed from the HSE website, however ALG are keen to have a replacement piece of guidance. It was noted that Asbestos Liaison Unit (ALU) is part of HSE construction but not policy and EA are also involved. CB has asked that any subsequent amendments to ALG documents involve SF as chair of the JIWG, to</p>	

	<p>ensure that commentary on waste processing and environmental permitting does not conflict with other guidance and there is good signposting with the JIWG work.</p> <p>CB has asked the team leader in ALU to contact SF. CB to pass the head of ALU contact details to SF. SF to ring him and introduce himself.</p>	CB & SF
6.	<p><b>HSE</b> <b>HSG 248</b></p> <p>CB confirmed that there has been no progress to the updating of HSG 248 due to other more pressing HSE work commitments. CB will discuss internally to try and get a timetable for delivery.</p> <p><b>ACOP</b></p> <p>CB confirmed that the amended ACOP is out for consultation and comments are due back on 30<sup>th</sup> September 2013.</p> <p>CB confirmed that at present there is no reference to the JIWG work but sees no problem in referencing the work. SF was requested to forward some suitable words for CB to consider.</p>	<p>CB</p> <p>SF &amp; CB</p>
7.	<p><b>Laboratory Analysis</b> <b>SCA Blue Book Method</b></p> <p>SF confirmed that Hazel Davidson is going to chair the SCA group looking at developing a unified approach for laboratories testing asbestos. This work will feed into the JIWG work.</p> <p><b>CAR 2012 definition of asbestos/HSG 248 definition of 'trace'/de minimis</b></p> <p>CB confirmed that there is unlikely to be a de minimis level that would be accepted in legislation and there is very little chance of CAR being amended.</p> <p>SF explained that the Dutch have limited their exposure limit to the quantification method limit.</p> <p><b>HSE Position on Quantification</b></p> <p>CB explained that industry could develop a stringent accreditation system with UKAS in relation to quantification however if this is not a requirement by HSE it will always be voluntary. HSE needs to always refer to the law and therefore can only enforce against that.</p>	
8.	<p><b>UK Background Concentrations Air/Soil</b></p> <p>SF confirmed that an outline proposal had been sent to Defra to help support the JIWG work by undertaking a national asbestos background survey of air and soil. We wait to hear if this is to be supported.</p>	
9. & 10	<p><b>AOB &amp; Next Meeting</b></p> <p>NH to send round a Doodle for potential meeting dates in early October. The next meeting will be a roundtable face to face meeting.</p>	NH