Asbestos In Soils

An update on progress

Based on Seamus Lefroy-Brooks

July 2015

Updated in agreement with C Swainston

Asbestos in Soil
Introduction

- Introduction - Why the Continued Interest?
- Update on work in progress and completed
- Anticipated time-scales for further works
- What are the issues affecting the development of “safe” values for soil?

Asbestos in Soil
Why the interest?

- Personal Health
- Public Perception
- Deaths
- Corporate Liabilities
  - Control of Asbestos Regulations (CAR)
  - Supreme Court Judgements

Asbestos in Soil
Why the interest?

£ Development Uncertainty

Who knows what the final cost will be?

Asbestos in Soil
Development Uncertainties

What is the regulatory position?

- Planning
- Waste
- Health & Safety Executive (HSE)

Asbestos in Soil
Development Uncertainties

What are the options?

- Should all asbestos be removed?
- Can asbestos be left on site?
- What is the risk?
- What is the attitude of development funders?
- What is the attitude of local authorities?
- What is the attitude of the residents?

Asbestos in Soil
Development Uncertainties

How can we work safely with affected soils?

- CAR 2012

Asbestos in Soil
2010-2011 Origins of Current Work

- Laboratory screening of samples
- EIC Asbestos in soils Sub-Group
- AGS Asbestos in soils Sub-Group
- CL:AIRE Definition of waste: Industry Code of Practice
- CAR 2006 criticisms
- HSL revision of HSG 248 analysts guide and other ACOPs
- CIRIA project

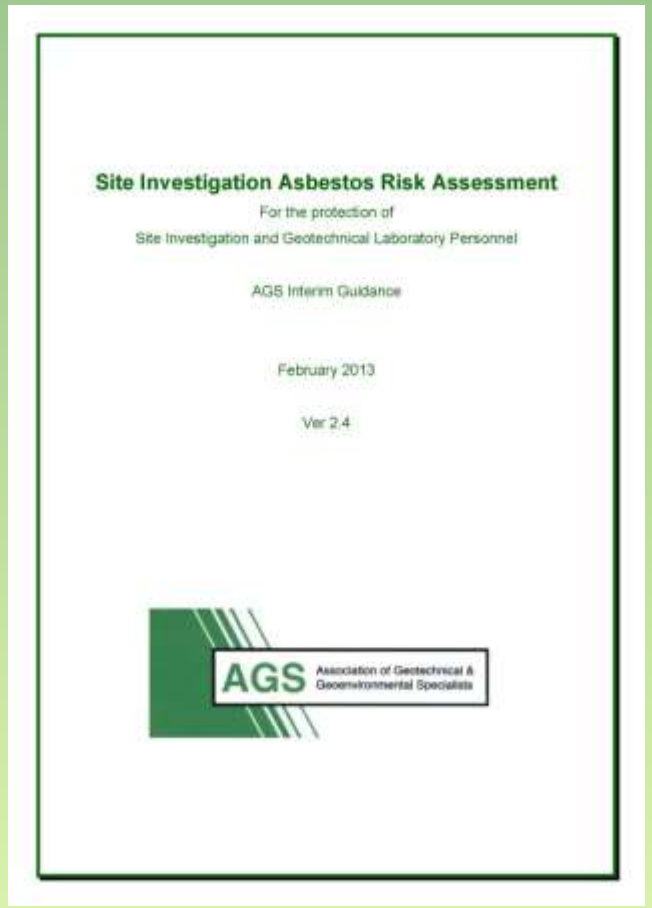
Asbestos in Soil – Nov 2011 Manchester Conference

Asbestos in Soil
2012 Work

- CAR 2012
- JIWG Joint Industry Working Group
- AGS Asbestos in soils Sub-Group
- CIRIA Project RP961
- EA Hazardous Waste Guidance
- UKAS consistent methods
- HSL WG2 revising HSG 248 analysts guide

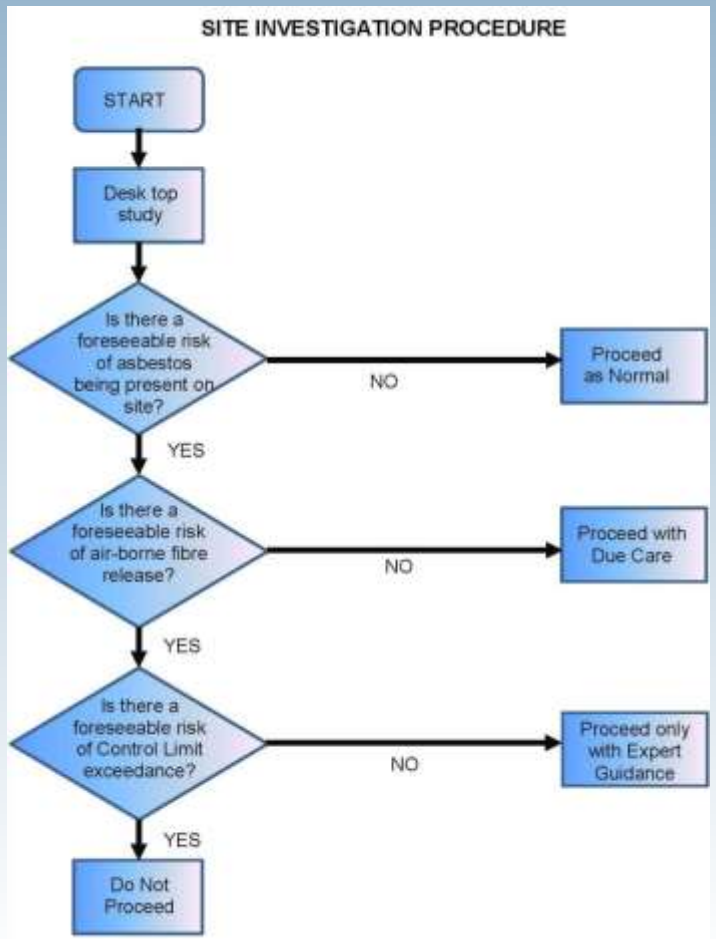
Asbestos in Soil
Joint Industry Working Group (JIWG)

Asbestos in Soil
AGS Asbestos in soils Sub-Group 2013



http://www.ags.org.uk

Asbestos in Soil
AGS Asbestos in soils Sub-Group



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Asbestos in Soil
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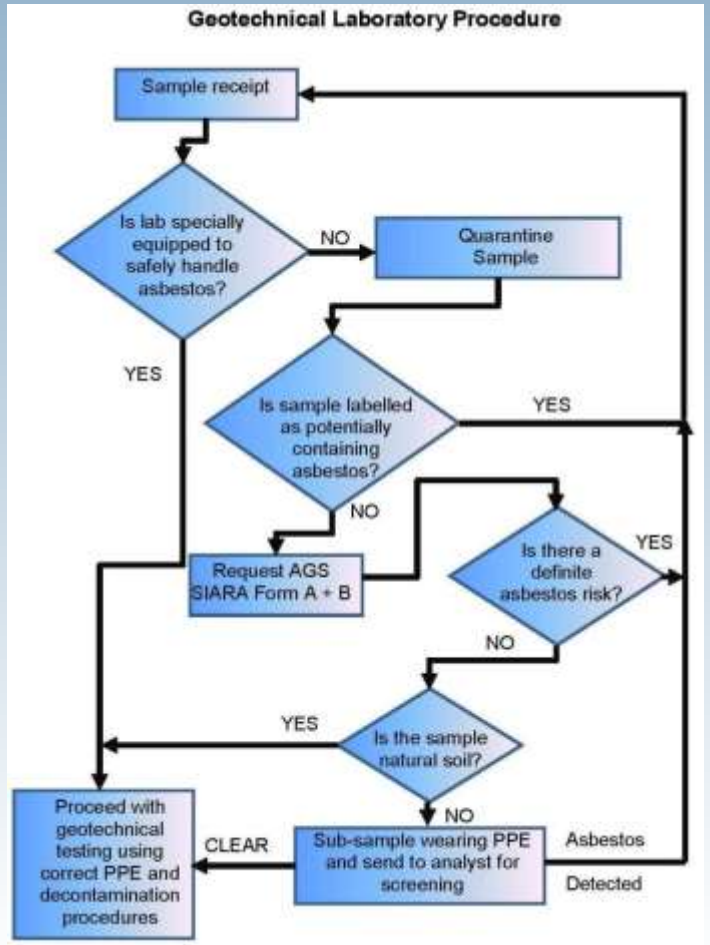

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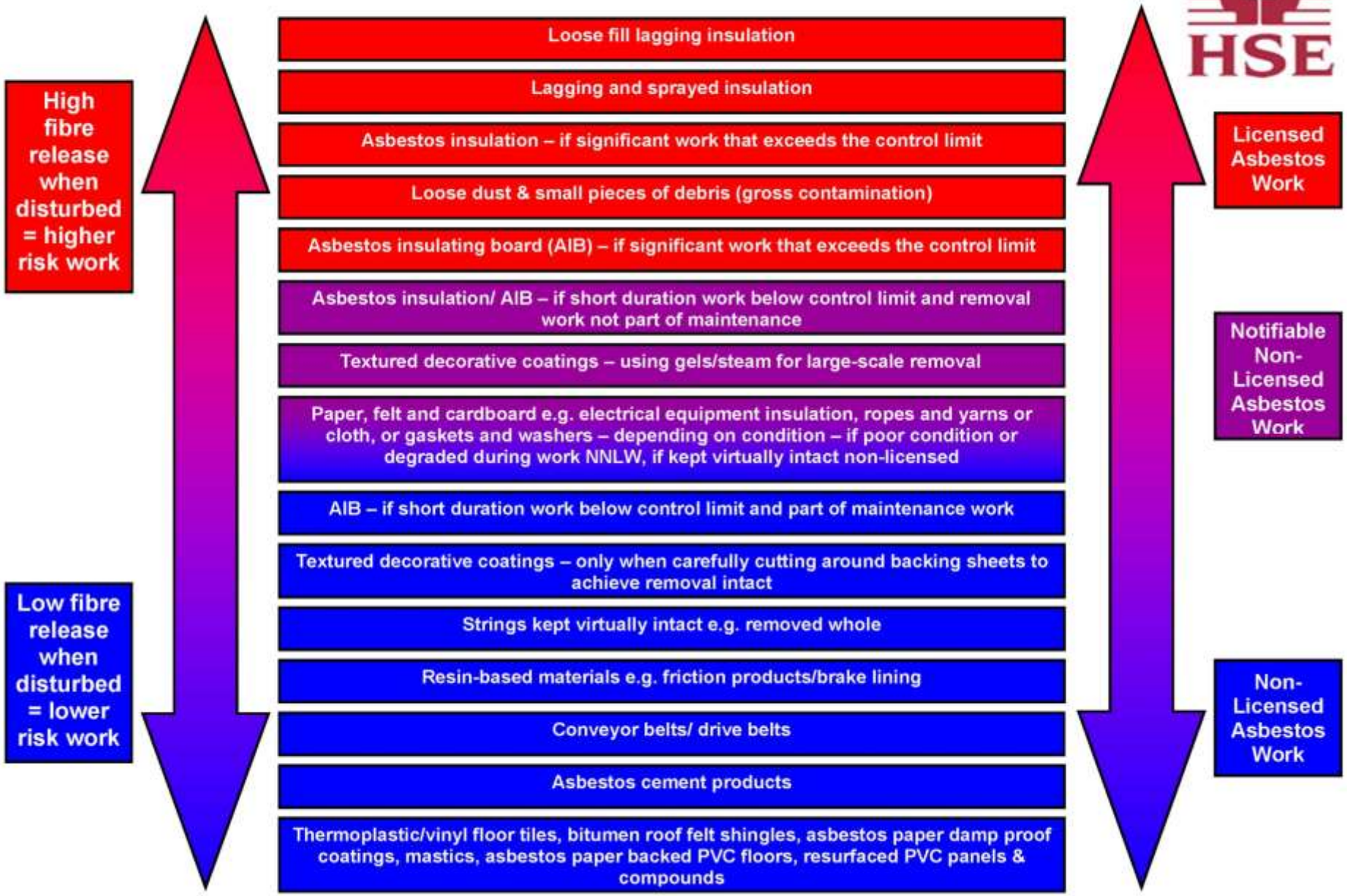
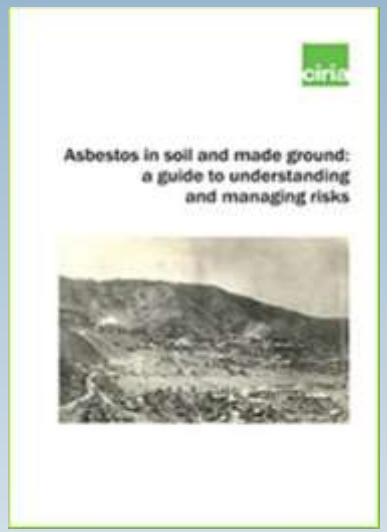
Illustration of Asbestos Work Categories



Asbestos in Soil
CIRIA PROJECT RP 961 March 2014



Details the background to risk, world perspectives and UK case law but does not detail a full risk assessment process.

Highlights many uncertainties still to be addressed and considered…..

Asbestos in Soil
HSE Revision to ACOP L143 2013

HSE
Health & Safety Executive

Review of ACOP L143 Work with materials containing asbestos

Published 2013 but no references to asbestos in soil

Incorporated L127 (work in non domestic premises)

A future update may signpost the work of the JIWG for this.

Asbestos in Soil
HSE Revision to HSG 248 Analysts Guide

HSE
Health & Safety Executive

Review of guidance still underway

Annex 2 (Asbestos in soils) has been drafted by WG2

HSE currently preparing revisions to other chapters

Still no new edition since 2005

No release date yet confirmed

264 (Survey Guide) updated 2012/13 - nothing on soils

Asbestos in Soil
Hazardous Waste Guidance

- Revision to WM2 – released in 2014
- JIWG statement on Asbestos in Soil
- Unlikely to be anything else significant due to budget constraints

Asbestos in Soil
Joint Industry Working Group 2015

"Code of Practice on Asbestos in Soils, Made Ground and Construction & Demolition Waste."

..currently preparing skeletons or putting meat to the following chapters

A. Investigation & monitoring – AGS document basis with HSE input?
B. Risk assessment – Algorithm, flow chart and basic assessment methodology
C. Waste management – WM2 – analysis of consequences
D. Laboratory analysis – Standardised methods agreed – No BS
E. Regulatory issues (CAR & EPR) – Legal update and Algorithm

Issues affecting the development of "safe" values for Asbestos in Soils

- It is the inhalation of fibres that causes problems…
- Dermal and ingestion pathways are not very significant
- It is not just a matter of the amount of fibres that you inhale, but also the type of fibre (different shapes), the form they are in and how often you are exposed
- What is the relationship between the amount of fibres in the air and the risk of disease? – not simple to determine…
- Is there a relationship between the concentration of air-borne fibres and the weight concentration of fibres in the soil? – possibly, but it is not a simple one and depends a lot on the type of soil

Conclusions regarding the development of "safe" values for Asbestos in Soils

- There are many factors affecting the exposure model, so that a meaningful generic figure (or figures) will probably not emerge
- Laboratory "dustiness" testing – relevance?
- Activity based testing – more relevant but possibly illegal?
- Counting no. of fine fibres in soil sample more relevant than mass.
- A precautionary approach would effectively result in a zero value that is neither helpful nor workable – non threshold?
- It may be that having identified the presence of asbestos in soil, it will be easier to control and manage it rather than try for a quantitative risk assessment for some time

Asbestos In Soil

Thank you