

Asbestos in Soil: Classification of Work

Appendices are attached to Technical Working Group minutes when the nature and extent of discussions (or the complexity of the subject) warrants further explanation and clarification. The following is a summary of the discussions and conclusions on the above topic.

Licensed and Non-Licensed Work:

Licensable work is defined in CAR 2012 Regulation 2(1) and is essentially work on certain defined asbestos products. These are asbestos coatings; and work on asbestos insulating board (AIB) or asbestos insulation which is not short duration. It is important to note that the definition of licensed product does not specify an asbestos type (e.g. crocidolite, amosite etc.).

Asbestos containing materials (ACMs) in buildings are often easy to identify as specific licensed products. However, the situation is generally different with ACMs in soils. Asbestos materials in soil will often have physically degraded and have changed appearance and therefore may not be readily identifiable as its original source material (e.g. lagging, insulation etc.) (see Photo 1). For this reason, the definition of asbestos products used in CAR2012 as a means of establishing licensable work cannot always be applied. Where the asbestos material in soil (e.g. debris) is not identifiable as a particular original product, then its removal would only become licensed work if the Control Limit or sporadic and low intensity limit (i.e. the STEL)(0.1f/ml (4-hour TWA and 0.6f/ml 10-minute TWA respectively) were likely to be exceeded. There is extensive airborne monitoring data which shows that these limits are very unlikely to be exceeded during soil related work. Therefore most work on degraded asbestos materials in soils will be non-licensed. This process is presented schematically in Figure 1.

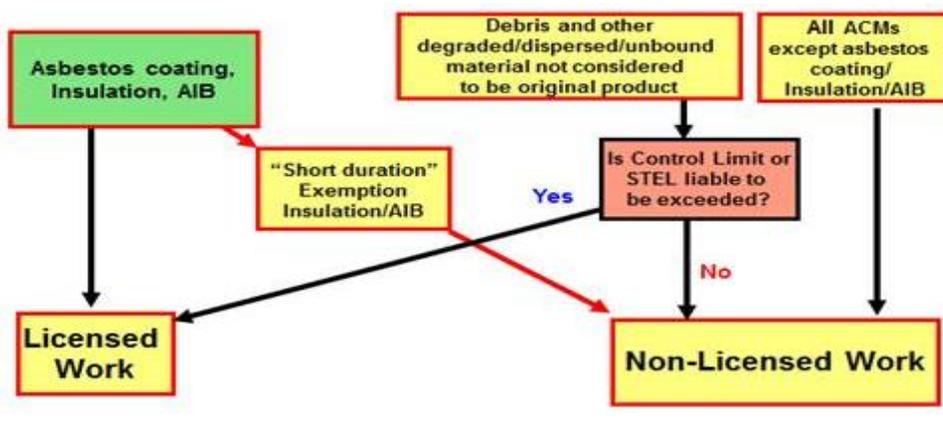


Figure 1: The decision making process to establish if asbestos soil work would be licensed or not.

Notifiable Non-Licensed Work (NNLW) and Non-Licensed Work:

Non-licensed work also has requirements for notification, medical surveillance etc. unless it meets certain exemption criteria. The exemption conditions are set out in CAR2012 Regulation 3(2). The exemptions apply where the work involves either (i) short, non-continuous maintenance activities in which only non-friable materials are handled or (ii) removal without deterioration of non-degraded materials in which the asbestos fibres are firmly linked in a matrix. The key considerations are whether the asbestos work can be classed as “maintenance” or “removal”. If the work is not “maintenance” then by default it is “removal”.

The construction definition of maintenance work is used i.e. renovation, repair, up-keep, redecoration. Most asbestos soil work is unlikely to be classed as “maintenance”. Therefore it will default to “removal”. In this situation, the criteria to be used to assess whether the work is exempt from notification are: the condition of the material at the outset (i.e. is it degraded?) and the process of removal (i.e. will the material be degraded/deteriorate during the removal?). In many cases, the material will be considered to be in a degraded state and therefore the work will be notifiable (i.e. NNLW).

There may be some exceptions to this e.g. whole or fragments/pieces of rigid material still essentially intact e.g. asbestos cement items, floor tiles or bitumen. Such materials even in fragment form still retains their structural integrity so that, each piece would still be regarded as non-degraded. If there is no further deterioration of the material during removal from the soil (which there is not likely to be with excavation or hand picking procedures), then the work will be exempt from notification. However, where such materials were present as part of mixed asbestos waste, then the work would be notifiable i.e. NNLW.

A summary of the different licensed and notification categories of asbestos soil removal (with examples) is shown in Figure 2.

All Work

Irrespective of the category of work involved, all work must be adequately controlled.



Photo 1. Degraded asbestos material not identifiable as its original product.
Photo courtesy of Hydrock Group

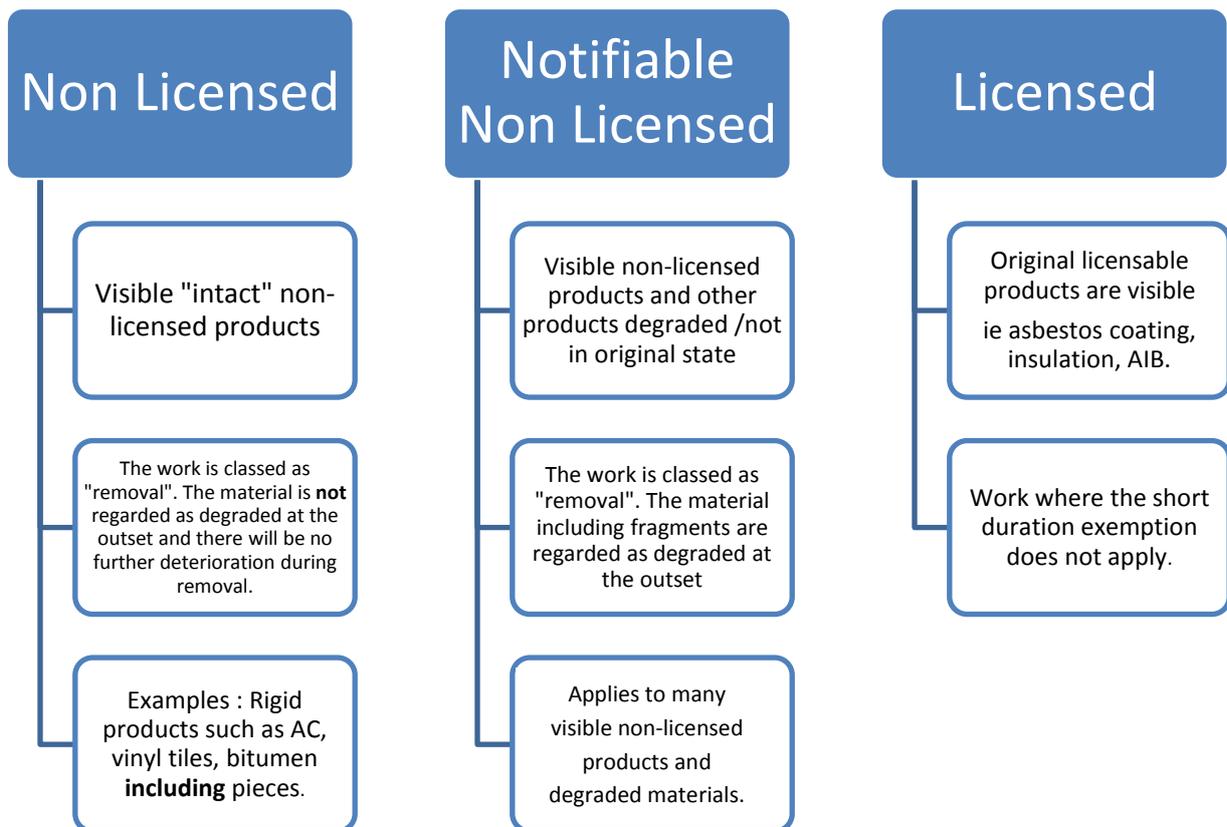


Figure 2: A summary of the different licensed and notification categories of asbestos soil removal.