

SPECIAL WASTE REGULATIONS 1996 SPECIAL WASTE ADVISORY NOTE

ASBESTOS CONTAMINATED WASTE

Ref: SWAN/12

Background

Asbestos was used extensively in the 1940s to early 80s because of its thermal insulating properties, resistance to degradation and tensile strength. It was used as a moulding or sprayed coating/mix in building materials: Lagging for pipes and boilers, firebreaks, panels, partitions, ducts, soffit boards and around structural steel work.

Other uses were hydrated cement products such as corrugated sheets for roofing or cladding, gutters, rain pipes and water tanks; millboard and paper products for electrical insulation; woven items such as ropes and blankets and textured applications such as decorative plasters and paints. This guidance assists in the classification of waste contaminated with asbestos.

Waste Classification

Asbestos is a naturally occurring silicate mineral and exists in three chemical types - **chrysotile** ('white'), **amosite** ('brown') and **crocidolite** ('blue')¹ – either in a bonded or fibrous form. These are all classified the same on the ASL with risk phrases R45 and T:R48/23² (see also Example B17.2 in WM2). The fibres are very fine, less than 3 microns in diameter and respirable into the lung passageways where they can lodge indefinitely and penetrate tissue.

Asbestos materials may be found with binding agents in, for example cementitious mixes, car brakes and old electrical equipment. Coating, wetting, bagging etc. of any asbestos waste will not change its classification.

There are numerous entries that refer specifically to asbestos throughout the EWC depending on the manner and source of waste arising. These (rather than those that refer to 'dangerous substances') should be used unless the waste happens to be contaminated with other hazardous components.

Contaminated soils, Insulating materials and Construction and demolition waste

17 05 03* Soil and stones containing dangerous substances

17 06 01* Insulation materials containing asbestos

17 06 05* Construction materials containing asbestos

Note that it is the presence of asbestos containing materials themselves that confers the hazardous status of the waste: It is not acceptable to compare the thresholds as a proportion to the whole waste unless the fibres are free and dispersed. 17 06 05* should be used in preference to any of the other Chapter 17 wastes for different construction wastes.

Industrial process or manufacturing waste containing asbestos

06 07 01* Wastes containing asbestos from electrolysis

06 13 04* Wastes from asbestos processing

10 13 09* Wastes from asbestos-cement manufacture containing asbestos

Packaging waste (see also SWAN05³)

15 01 11* Metallic packaging containing a dangerous solid porous matrix (for example asbestos), including empty pressure containers

Other waste

16 01 11* Brake pads containing asbestos

16 02 12* Discarded equipment containing free asbestos

Treated waste

Waste forms that arise from treatment processes that solidify or stabilise the asbestos are classified under Chapter 19 (see [Interim Technical Guidance Note](#)). Only techniques that degrade the fibres so that they fall below the lowest threshold of 0.1% would render the treated waste non-hazardous.

Notes

¹ Amosite and crocidolite are sometimes referred to as '**amphibole**' asbestos and chrysotile as '**serpentine**' asbestos

² ASL = Approved Supply List (provides simple information for the labelling of products with chemicals that could be dangerous to human health or the environment) which can be found online on the NCEC website at: <http://www.the-ncec.com/cselite/index.html>

R45 = May cause cancer, this identifies that the waste is **carcinogenic H7** at 0.1%; R48/23 means risk phrase R48 (Danger of serious damage to health by prolonged exposure) used in combination with R23 (toxic by inhalation), this identifies that the exposure route is inhalation and that the waste is also **harmful H5** at an asbestos content of 3% and also **toxic H6** at 25% w/w.

³ Special Waste Advisory Note 5: Packaging and Damaged Goods