



## Position Statement on Testing of Water Retentive Soils, Mulches and Structural Fill Products

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Eclipse Soils is a leader in 'practical sustainability' and one of the State's largest producers of high-quality mulches, water retentive soils and structural fill products.

Eclipse Soils understands the sensitivity around the risk of asbestos and other contaminants in products resulting from inadequate quality control measures. Eclipse Soils works to a comprehensive Environmental Management System and Quality Control Plan to mitigate these risks and ensure all products meet environmental and health standards, as well as meeting Australian Standards (for soils and mulches), and geotechnical standards (for structural fill products).

Eclipse Soils only accepts materials which have a beneficial use and a 'belts and braces' approach is taken to ensure final products are fit for purpose prior to offsite sale, which can be summarised as follows:

### 1. Exclusion of high-risk inputs

- a. No mixed construction and demolition waste is accepted and screened to make saleable products
- b. No organic waste is accepted in the form of animal wastes, food organics and garden organics (FOGO), verge collections or construction waste (organics from FOGO, verge collections and construction waste poses the highest risk of asbestos in mulch)
- c. No concrete is accepted for crushing and recycling. Eclipse Soils has a long-standing practice of not accepting concrete for crushing and believes that concrete poured prior to 1990 should not be crushed as the asbestos related health risks far outweigh any benefits. This concrete should only be used for deep structural fill.

### 2. Vetting of input materials prior to acceptance

- a. **Mulch Inputs** – only hardwood trees are accepted from clean sources, the majority of which is a byproduct from forestry or mining, and the remaining is sourced from 'greenfield' development. Mulch inputs undergo a visual assessment, as well as testing for dieback and asbestos.
- b. **Water Retentive Soil and Structural Fill Inputs** – suppliers of inputs provide statistically robust scientific data generated by competent environmental scientists. Inputs are assessed against the most stringent published environmental criteria for Ecological Investigation Levels ("EILs") as contained in the Department of Environment and Conservation (2010) document "*Assessment Levels for Soil, Sediment and Water*" and the Department of Water and Environmental Regulation (DWER) and Department of Health (DoH) criteria for asbestos prior to use as an input.

### 3. Processing of input materials

- a. **Mulch Inputs** –hardwood trees are pasteurised and composted into ingredients for soils and mulch products (fines as a carbon rich soil ingredient and coarse material for mulch use to minimise evaporation and weed growth).
- b. **Water Retentive Soil and Structural Fill Inputs** – in cases where inputs do not meet EILs, but can provide a beneficial use following treatment, soils are remediated through processes such as bioremediation. Following remediation, soils are tested by a NATA accredited laboratory and validated to meet EILs.

### 4. Testing of Final Products

- a. **Mulches** – Each batch is sampled and tested to ensure the following:
  - i. Mulches meet EILs and Australian Standard AS4454
  - ii. Mulches are free from dieback
  - iii. Mulches meet the DWER and DoH health criteria for asbestos
  - iv. As a precaution, additional sampling is undertaken for asbestos at a minimum rate of 1 sample per 200m<sup>3</sup> of mulch produced.
- b. **Water Retentive Soils** – Each batch is sampled and tested to ensure the following:
  - i. Soils meet EILs and Australian Standard AS4419
  - ii. Soils meet the DWER and DoH health criteria for asbestos
- c. **Structural Fill** – Sampling is conducted at a rate 1 sample per 400m<sup>3</sup> to ensure the following:
  - i. Structural Fill meet EILs
  - ii. Structural Fill meets the DWER and DoH health criteria for asbestos
  - iii. Structural Fill is geotechnically fit for purpose.

**Test results for all products are available upon request.**