Australian Government
Asbestos and Silica Safety and Eradication Agency

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NSW Government
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Submission from the Asbestos and Silica Safety and Eradication Agency (ASSEA) on the *Discussion Paper for the Review of Asbestos Management in Recovered Fines and Recovered Material*

Thank you for the opportunity to provide comments to this discussion paper.

The **Asbestos and Silica Safety and Eradication Agency (ASSEA)** coordinates national actions to eliminate asbestos-related disease in Australia, through the Asbestos National Strategic Plan. ASSEA works with all levels of government, as well as with non-government groups, to improve the effective and safe management, removal and disposal of asbestos. Our functions have also recently expanded to cover the elimination of silica-related disease, through coordination of the Silica National Strategic Plan.

We understand that the purpose of the review is to '*evaluate any scientific evidence that would support alternative approaches to managing asbestos in recovered material and fines, particularly the potential adoption of thresholds as opposed to the current zero-tolerance approach*'. We are not in a position to comment in detail on the technical questions asked, and will leave that for relevant asbestos professionals to provide their expertise.

However, for consistency we do support the need to consider a national risk-based threshold level for asbestos in waste and soil intended for beneficial reuse, and commend the NSW government's investigation of the evidence base to support this. This is important because there are four main sets of laws that apply (i.e. work health and safety, environment, public health and dangerous goods) which need to be reconciled, if enhancements to broader asbestos waste management practices are to be implemented.

Notwithstanding the regulatory framework, ASSEA wishes to reiterate some of the important information in your discussion paper which it sees as foundational to evaluating such asbestos management practices. In the Australian context, there are four key documents that deal with asbestos contaminated waste soil, which must be considered in any discussion of recovered material and fines. These are:

- National Environment Protection Council (NEPC). National Environment Protection (Assessment of Site Contamination) Measure (2013)
- WA Department of Health. Guidelines for the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia (update 2021)
- WA Government guideline. Managing asbestos at construction and demolition waste recycling facilities (2021)
- Safe Work Australia. How to safely remove asbestos - Code of Practice (2011)

The WA guidelines are the most comprehensive Australian guidelines that deal with asbestos waste.

The NEPC measure refers to the 2009 version of the WA Department of Health guidelines, noting the conclusions of the Swartjes & Tromp (2008) study that a soil level of 0.01% (w/w) for friable asbestos should keep asbestos fibre levels in air below 0.001 fibres per millilitre (f/ml) and probably to around 0.0001 f/ml. This information appears in the 2021 version of the the WA Department of Health guidelines, which also state that a level of 0.001% (w/w) has been applied to both friable asbestos and asbestos fines. In this context we also note the Safe Work Australia workplace exposure standard for asbestos (all forms and mixtures) is an eight hour time weighted average of 0.1 f/mL.

However, the WA documents recognise that there is a high uncertainty associated with quantifying asbestos concentrations below 0.01% w/w, and a level below 0.01% (w/w) asbestos is outside the conditions set by AS 4964-2004 (*Method for the qualitative identification of asbestos in bulk samples*). It should be noted, however, that AS 5370:2024 supersedes this previous standard and includes more detail on the use of electron microscopy techniques for sampling and identification of asbestos fibres.

We also would like to draw your attention to the paper by Malinconico *et al* 2022 (J Hazard Mater 436, 129083). This paper provides two European limit values for asbestos in the soils, the lowest being 0.01% (w/w).

Other reports and papers of potential interest for your research include:

- Study on asbestos waste management practices and treatment technologies - Publications Office of the EU (europa.eu)
- Short, thin asbestos fibers contribute to the development of human malignant mesothelioma: pathological evidence - PubMed (nih.gov)
- Quantification of short and long asbestos fibers to assess asbestos exposure: a review of fiber size toxicity | Environmental Health | Full Text (biomedcentral.com)
- Full article: The health effects of short fiber chrysotile and amphibole asbestos (tandfonline.com)

Thank you again for allowing us to make a submission on your discussion paper, and we look forward to the final review.

Yours sincerely

[redacted]

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