

# **CAPABILITY STATEMENT**

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# EnviroMaster is delivering products and processes that make Australasia cleaner, greener and safer.

EnviroMaster is the Australasian licensee of Thermochemical Conversion Technology (TCCT) a unique process that destroys asbestos fibres.

TCCT utilises size reduction of wastes, application of fluxing solution and heat to treat asbestos waste that would otherwise be landfilled.

The TCCT process results in an inert, non-hazardous end product that can be used in a variety of non-structural construction applications.

## Asbestos Destruction, not Asbestos Disposal.

### From harmful to harmless

TCCT results in the permanent and irreversible destruction of asbestos, converting it into a non-hazardous, inert product.

#### Reduces waste to landfill

TCCT diverts asbestos, and its containment material, away from landfill. Landfills are at capacity, so TCCT frees up valuable realestate.

#### Reduces waste volume

TCCT results in waste minimisation - utilising this technology significantly reduces both the mass (average 33%) and volume (average 73%) of asbestos waste.

#### Utilises plastics for fuel

TCCT utilises plastic waste including polyethylene and polypropylene, which would otherwise be landfilled, to generate fuel to run processing.

#### Commercially viable

With the rising cost of asbestos disposal, TCCT provides a commercially viable alternative to landfill.

### Technologically mature

Developed over 20 years, making it the most mature technology available worldwide for the treatment of asbestos. Granted a National Operating Permit by the US EPA.

Over 1,000 tons of asbestos waste have been successfully destroyed.



## A GLOBAL GAME CHANGER

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This exciting patented technology will set a worldwide precedent for managing asbestos waste, and eradicate Australasia's asbestos legacy.

#### Simple. Yet Effective.

Asbestos waste is processed via a slow-speed, rip-shear shredding system to ensure the material is a uniform particle size.

A fluxing solution is then introduced before the asbestos waste is fed via a conveyor system to a rotary hearth furnace.

The asbestos waste is heated to a temperature of approximately 1230°C as it rotates around the furnace.

### In 20 minutes, asbestos fibres are 100% destroyed.

The non-hazardous, inert end product is an aggregate which can be used in many non-structural civil engineering applications such as road base.

Off-gases of the TCCT process are routed through a pollution abatement system that ensures the facility will not discharge any asbestos fibres and will meet all relevant emission standards.

## **Our Experience**

EnviroMaster was founded in 2016 by Wayne Loane and Phil Tingey.

Wayne has over 20 years' experience in the waste industry and has developed such products as the 'Aussie Skip Bag', 'Hazibag' and 'Barrier Sack'.

Phil has an extensive background in specialist materials handling and engineering solutions with a particular focus on the design, manufacture, installation and servicing of overhead and workstation cranes.

Since its inception, EnviroMaster has been supported by Dale Timmons, the inventor and developer of TCCT.

Dale is a registered geologist / hydrogeologist with over 25 years' experience in waste management primarily thermal and recycling technology, vitrification of waste, and technology development and commercialisation.