

Future use of household waste and mixed waste organic outputs

The NSW Environment Protection Authority (EPA) is seeking feedback on the future use of household waste and mixed waste organic outputs (MWOO), along with a proposed transition package to support the alternative waste treatment industry to move to sustainable uses for household waste.

Key points

- A transition package of up to \$6.5 million is proposed to help the alternative waste treatment industry transition to new uses for household general waste.
- In October 2018 the land application of MWOO was stopped due to risks associated with chemical and physical contaminants. Since then, the EPA has undertaken substantial further investigation and research.
- After reviewing assessments of human health and ecological risks of applying MWOO to land, and considering further controls, the EPA does not intend to allow MWOO to be used as a soil amendment on agricultural, mining rehabilitation or forestry land.
- Research shows that the potential risks outweigh the limited benefits for application of MWOO on agricultural land, given the levels of contamination in the material from glass and plastics, as well as chemicals.

EPA support for councils and industry to transition

Since October 2018, the EPA has provided support to minimise the risk of disruption to kerbside collection services and ensure that any additional transport and landfill costs are not passed on to councils or ratepayers. This funding has been extended to February 2020.

A proposed transition package has been developed to help the alternative waste treatment industry transition to sustainable resource recovery outcomes for the organic materials and other resources currently found in household general waste.

What support is being provided?

There are new opportunities in the future for the community, councils and the alternative waste industry, with a better product.

Future outcomes for waste collected in red-lid bins may include refuse derived fuel, building materials and high-quality compost made with source separated food and garden organics.

The proposed transition package includes funding for AWT operators to undertake research and development into alternative products and end market products for household general waste and to make the required changes to their facilities to produce these products.

As alternatives for food recovery, more than 40 NSW councils are already providing source-separated kerbside waste collections to households or food-only collections in multi-unit dwellings.

The funding package also seeks to help increase this rate by providing infrastructure funding for the AWT industry to introduce a new food organics and garden organics (FOGO) processing line at their facilities.

What is mixed waste organic outputs?

Mixed waste organic outputs (MWOO) is the end-product of a process which aims to separate the organic waste in household red-lid bins from other waste material. Under strict controls it was

previously allowed to be applied to land as a soil amendment.

While it is known as Mixed Waste Organic Outputs (MWOO), it has been given different names by manufacturers and suppliers including Agriblend, Rehab-ARRT Rejuvenate, Pasture-ARRT Rejuvenate, and OGM (organic growth media).

Is MWOO Compost?

No. The research findings and regulatory changes apply to MWOO produced by processing mixed waste from red-lid bins only, not the source-separated food organics and garden organics (FOGO) from green-lid bins that are used to produce compost.

Compost is made from inputs of mulch, garden organics, food waste, manure and paunch that have undergone composting. Inputs are broken down by microbes having reached certain temperatures to destroy pathogens, seeds and other weeds.

Compost has its own regulatory rules, i.e. a resource recovery order and exemption, that must be complied with to lawfully supply and land apply. Compost is cleaner than MWOO and is not impacted by the EPA's position on MWOO.

What research was conducted?

The seven-year independent research program was extensive and involved studies by the CSIRO, the NSW Department of Primary Industries, the University of Sydney, the University of New England and the Office of Environment and Heritage (now the Department of Planning, Industry and Environment). The results were peer-reviewed by local and international experts.

As part of the research program the EPA commissioned a Human Health and Ecological Risk Assessment to better understand the potential risk of exposure to people on farms and to the environment, where MWOO had been applied.

Are there any health concerns?

The risk assessment concluded that in most scenarios the risk of exposure to chemicals such as polybrominated diphenyl ethers and perfluoro octane sulfonate for people on farms where the material had been used, **was generally low and acceptable.**

An expert panel convened by NSW Health has reviewed the research and has advised that it does not expect any health effects from past use of MWOO on agricultural land.



Physical contaminants such as plastic and glass have been found in MWOO samples

The historical use of MWOO

The first production of MWOO in NSW by industry began in 1999. In 2010, the EPA imposed restrictions on MWOO's processing and land application. The restrictions did not allow use of MWOO for domestic and urban purposes, but use was permitted for agriculture, plantation forestry and mine rehabilitation, subject to strict controls.

The controls set out how much material could be applied to any land, the types of agriculture it could be used for and applied withholding periods for grazing animals after application.

What happens next?

A period of public consultation to seek feedback on the future use of MWOO and on the design and operation of the proposed transition package is open until **Thursday 28 November 2019**. Impacted stakeholders and community members are encouraged to participate so that all views, advice and information can be considered.

Where do I go for more information?

www.epa.nsw.gov.au/mixed-waste-organics

Environment Line on **131 555**

Email: info@epa.nsw.gov.au

Photo: Clumps of earth showing MWOO contaminants/Photo supplied/EPA

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