

FACT SHEET - DECEMBER 2023

PREPARING GRAIN BAGS FOR RECYCLING

A step-by-step guide

THE PROBLEM WITH AG PLASTICS

Australian agriculture uses a large amount of plastics in the production of food and fibre.

A high proportion of plastics become waste when they reach the end of their useful life. Whether they are sent to landfill, burned or buried, this plastic waste can pollute our environment and harm human health.

Plastics don't decompose once they are in the environment, but rather break into smaller and smaller pieces, becoming what is known as microplastics. Plastic has been found in the deepest parts of the ocean, in the air we breathe and even in human organs. It presents a global problem, but we have the opportunity to address it by working together.

The National Agricultural Plastics Stewardship Scheme explored recycling solutions for end-of-life agricultural plastics, with a focus on protective film, irrigation pipe and netting. The scheme worked on developing a viable market for agricultural plastics to be recycled to reduce waste and save money.

Industry and producers are keen to reduce their plastic waste and are supportive of a plastic stewardship scheme. Putting waste reduction into practice is essential while we transition the scheme to national implementation in 2024.

KEY MESSAGES

Plastic waste generated on-farm can pose a significant threat to the environment. It is usually stockpiled, buried or burned, or sent to landfill.

- The National Agricultural Plastics Stewardship Scheme explored solutions for recycling this plastic.
- The scheme is now transitioning towards national implementation in 2024. Producers are at the forefront of waste reduction, putting principles into practice.
- Broadacre cropping alone produces over 12,000 tonnes of plastic every year across Australia.
- Grain silo bags and grain bunker covers are two sources of plastic waste in the grain industry.
- Preparing your used silo bags and grain bunker covers will make a significant contribution towards reducing potential harm to the environment, and support the growing push to create a market for recyling these plastics into new, useful products.



Recycling agricultural plastics is currently limited as they are difficult and costly to manage. Long transport distances to recyclers, limited collection options and contamination with soil and plant material make it challenging to recycle agricultural plastic. The scheme explored ways to overcome these barriers and help producers recycle their used plastic.

PLASTICS IN GRAIN PRODUCTION

Grain silo bags are major sources of plastic waste in the grain industry. Grain bags are single use and are usually stockpiled on-farm as waste or sent to landfill (Figure 1).

Plastic sheeting used for grain bunker covers and liners is also a source of plastic waste. These are replaced every 3-5 years as the plastic material degrades in sunlight over time.

However, there is an opportunity to recycle these plastics so they can be turned back into useful products. Producers play an important role in preparing their grain bags and plastic sheeting for recycling (Figures 2 and 3).



Figure 1: An example of grain silo bags stored improperly on-farm.

PREPARING YOUR GRAIN BAGS FOR RECYCLING

Step 1

Straighten plastic on the ground, shaking off excess soil or plant matter. The plastic needs to be relatively clean to be recycled as soil and plant matter can create problems in the recycling process (Figure 2).



Figure 2: An example of a well-prepared grain silo bag for recycling.

Step 2

Tightly roll or coil the plastic using a grain bag roller or retriever. Alternatively, you can cut the plastic into manageable sections, then fold and bundle them. This approach saves transport costs by increasing the mass of plastics that can fit in one load. It also makes handling easier and more efficient (Figure 3).



Figure 3: An example of how to prepare your grain silo bags for recycling.

Step 3

Arrange transport to your nearest recycler or contact your local council for more information.

Many players across industry, government and private businesses are working together to make sure opportunities for recycling agricultural plastics increase into the future.

Action is needed from the ground-up to support the recycling of plastics and make it easier for producers to reduce their waste.

RECYCLING LOCATIONS

While there may currently be a shortage of affordable and viable options to recycle plastics from grain production, there is an opportunity for change.

Several processors are developing options to recycle grain bag and/or grain bunker plastics across the country. These processors are listed below.

 GT Recycling in Victoria services regional Victoria and recycles grain bunker covers: gtrecycling.com.au

- Recycling Plastics Australia in South Australia: <u>rpau.com.au</u>
- Olympic Polymers in Victoria accepts polyethylene and polypropylene based plastics but not polyvinyl chloride (PVC): <u>olympicpolymers.com</u>
- Integrated Recycling in regional Victoria recycles a range of plastics including grain bags: <u>integratedrecycling.com.au</u>

WHAT ELSE CAN YOU DO?

Some manufacturers of grain bags and/or bunker liners are working towards recycling solutions for their products.

For example, Gale Pacific has developed a closed-loop recycled grain bunker fabric and are working towards recycling solutions for their products. For more information visit: galecommercial.com/en_au/articles/recycling

By considering where grain bags and/or bunker liners are sourced, producers can make informed decisions around purchasing products made from recycled material.



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