

TRICKLE TAPE

The Problems and Solution/s

- There is no current stable coordinated and cost effective system to allow the recovery of Trickle Tape in Queensland
 - Recent History of Recovery:
 - RDT operated a mobile baler and exported bales to Asia 2010 – 2017 (ceased with China Sword Policy)
 - CDS were collecting from SEQ and exporting bales 2017 – 2019
 - *Australia Sunlight Group Pty Ltd* in Brisbane have recycled Plastic for the Lockyer Valley, Bundaberg and Bowen Regions 2021 - 2024
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ISSUES with Trickle Tape

- Buried on Farm
- Burnt on Farm
- Stored on Farm
- Landfilled by Councils

Only about 15% is
recovered for recycling
each year in Queensland



FURTHER ISSUES **with Trickle Tape**

- **Retailers are requesting improved sustainability standards from their suppliers however to expect each primary producer to find a recycling option is unrealistic**
- **In Queensland the Environmental Protection Legislation allows for on farm burial of agricultural plastics**
- **In the past 22 years there has never been any significant fine or penalty applied to farmers who burn plastic on farm**

BUNDABERG EXPERIENCE

- By the end of 2020, 350 tonnes of Trickle Tape Stockpiled and nowhere to send the Trickle Tape for recycling
- Worked with State Government and the two (2) main manufacturers *Rivulis* and *Netafim* to look at recycling options available
- Australia Sunlight Group since 2021 have recovered Trickle Tape from the Gatton, Bundaberg and Bowen (800 tonnes - 2 years)

MULCH FILM & TRICKLE TAPE

Tonnes - Bundaberg Region



Year	Plastic Mulch Film Landfilled	Loose Trickle Tape	Tight Rolled Trickle Tape	Total Trickle	Total All Plastic	Comment	Plastic Mulch Landfill Fee \$
2016/17	982			244	1226		\$85
2017/18	1160			347	1507		\$85
2018/19	1698			487	2185		\$85
2019/20	1358			369	1727	Waste Levy Starts \$75/tonne	\$135
2020/21	1181			483	1664		\$145
2021/22	1324	76	134	210	1534	Started charging loose \$150	\$250
2022/23	1160	80	77	157	1317	Waste Levy \$88/tonne	\$255

Waste and recycling

Ag Plastic and Trickle Tape

A guide to the disposal and recycling of Agricultural Plastics at your local Waste Facility

Bundaberg Regional Council's Landfill sites accepts agricultural plastic and trickle tape from across the region each year. At present this trickle tape is sent on for recycling however a significant portion

cannot be recycled and is buried in landfill as it is contaminated. As part of the conditions for recycling, trickle tape must NOT have silicon inserts or wire metal ties. When agricultural plastic such as trickle tape is too heavily contaminated with excess soil, vegetation or if it has not been adequately separated from other agricultural plastics and waste items, it becomes unusable and can no longer be sent for recycling and will need to be disposed of to landfill with a disposal fee payable.

Bundaberg waste facility – 46 University Drive, Branyan Queensland 4670

Product	Details	Waste fee
Trickle tape – roll	Clean – rolled into tight coil Free from excessive dirt, vegetation, wire and silicon inserts	FREE
Trickle tape – loose	Clean – loose/not rolled tight Free from excessive dirt, vegetation, wire and silicon inserts	\$185/t

Qunaba waste facility – 132 Potters Road, Bargara Queensland 4670

Product	Details	Waste fee
Trickle tape – contaminated	Unclean/unsuitable for recycling Trickle tape has excessive dirt, vegetation, wire and silicon inserts	\$275/t
Agricultural mulch plastic film	Agricultural plastic which is used in farming	\$275/t



Trickle tape – clean roll



Trickle tape – clean loose



Ag plastic mulch film

Customers should be aware that **loads delivered to Waste Management Facilities will be inspected** and fees will be charged for loads found to be contaminated and not declared to Council Gatehouse staff at time of entry.

Please refer to our **Waste Disposal Fees and Waste Facility Information** on Council website. If you have any further enquiries or are unsure of disposal conditions, please contact our Waste & Recycling Services Section.

Other Agricultural Products that can be recycled through the local recycling centre (MRF) are:

- DrumMUSTER Drums
- Bulk Fertilizer Bags
- Other Ag Plastics

Please contact the friendly staff at the MRF on 4155 3411 for more information or direct disposal options.

National Agricultural Plastics Stewardship Scheme – Update

SCHEME OPERATION



Collection sites

The scheme ensures the majority of plastic waste can be aggregated through strategically located collection sites that are relatively easily accessed by farmers to drop off material free of charge. The drop-off collection points for the scheme include those situated in priority locations with capacity to temporarily store and aggregate agricultural plastic waste prior to it being pre-processed and transported to a recycler.

The scheme plans to operate approximately 450 collection sites at full operation after 10 years.



Pre-processing

There are a number of options for pre-processing agricultural plastic waste as part of the scheme, depending on the type of plastic and regional context (e.g. number and location of collection sites). The main methods that will be employed include baling, chipping and granulating, however baling is preferred as it is suitable for most plastic types and mobile balers can be strategically moved to multiple collection sites.



Transport and logistics

Transport and logistics constitute a large proportion of scheme operating costs due to large distances between the source of plastic waste in regional and rural areas and location of recyclers often in capital cities.

This further highlights the importance of pre-processing to reduce size and minimise contamination of the agricultural plastic waste prior to transport from collection site to recycler.



Re-processing

The ultimate aim of circularity is for waste agricultural plastics to be turned back into their original products, such as irrigation tube being recycled back into irrigation tube and old table grape covers being used to create new table grape covers.

The recycling pathway of different plastic products and polymer types will differ based on a number of factors and influenced how the scheme was designed. This is largely dependent on the plastic value, quality and technical feasibility to be mechanically recycled. The scheme will preference mechanical recycling due to its technology readiness and commercial scale in Australia.



Communication and education

It is important that the scheme provides adequate farmer and industry training and education through targeted communications and capacity building initiatives.

Communication material will include fact sheets, retrieval instructions and frequently asked questions (FAQs) about the scheme, supported by online and traditional media channels to raise awareness of the scheme and promote participation.



Research and development

Research and development (R&D) will be critical to the scheme maintaining current markets and developing new markets for agricultural plastic waste. This will ensure there is sufficient demand for cost-effective recyclate based on supply, comparative to virgin resin prices.

WAY FORWARD

- ***Netafim, Rivulis and Toro*** as manufacturers step up and develop a **Product Stewardship Scheme** (*DrumMuster 2000, Big Bag Recovery 2015*)
- **Agricultural irrigation pipes** need to be added to the **Federal Environment Ministers Product Stewardship Priority List**
- **Government grants** should be provided to grower groups and / or recyclers to assist in the transport costs of recovering plastic from our Regions for recycling



drumMUSTER