

Northern Adelaide Waste Management Authority

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Helping to make roads and footpaths with glass recovered from kerbside recycling bins

Using broken glass to build useful urban amenities may not sound like an appealing prospect.

However, it is an innovative form of recycling that the Northern Adelaide Waste Management Authority (NAWMA) hopes will soon be introduced for a range of environmentally friendly civil construction applications in the northern region of Adelaide and beyond.

NAWMA is in the final throws of fine-tuning its new Glass Fines Recovery Plant at Edinburgh, and it is on track to recover up to 11,000 tonnes of glass fragments annually that would otherwise go to landfill.

NAWMA's Chief Executive Officer, Adam Faulkner, said the glass recovered from residents' yellow lid recycling bins that is not suitable to recycle back to glass bottles was being processed as a safe and sustainable aggregate substitute to form a base for roads and footpaths and pipe bedding.

A series of conveyors, screens, vibrating feeders, magnets and air classifiers operate in the NAWMA plant to capture small pieces of glass that have broken during collection and sorting processes.

"The glass fines, as they are called, contain ceramic, stone, porcelain or plastic that makes it unsuitable for reuse in glass manufacturing, but it can be processed into an ideal substitute to sand for a variety of civil applications," Mr Faulkner said.

"As part of this research and development project, we are currently trialling the use of glass fines for civil projects as an alternative to sand that would have to be mined from the natural environment.

"The project has potential to create new industrial and civil ventures and create jobs in the northern region and across South Australia."

NAWMA is a subsidiary of the Cities of Salisbury and Playford and the Town of Gawler and it also processes kerbside recyclables from a range of other metropolitan and country councils.

Mr Faulkner said NAWMA was working closely with its constituent councils to engage in trials, research and market development.

“The last piece of the puzzle is now for all tiers of government to follow the northern region’s lead and start requesting that their civil contractors use locally sourced recycled content,” he added.

The Glass Fines Recovery Plant was established at NAWMA’s Material Recovery Facility at Edinburgh with a \$500,000 grant from Green Industries SA.

“Using glass fines to create bases for roads and footpaths and other civil projects creates an important new market for this product while reducing reliance on mined sand as an aggregate,” Mr Faulkner said.

“NAWMA’s aim is always to create the highest value from recycled materials which means recycling clean glass back into glass bottles and containers.

“However, the small bits of broken glass that cannot be processed into new glass products can be used to help build useful amenities.

“This is one of the most powerful ways to show people in our community the benefits of recycling the correct things in their yellow-lid bins.

“It is a fantastic result for the northern region and a practical example of why recycling is so important.”

For interview or further information, contact NAWMA CEO, Adam Faulkner, on 8259 2100 or 0409 255 421.