



Shoalhaven Recycling

Glass Reprocessing Infrastructure

PROJECT REPORT

July 2012

PREPARED FOR
PACKAGING STEWARDSHIP FORUM
OF
AUSTRALIAN FOOD AND GROCERY COUNCIL (AFGC)

BACKGROUND

Shoalhaven Recycling has engineered a glass crushing machine to sit alongside their existing MRF that has the capacity to process glass fines to specified grades as required. Approximately 4.5 tonnes of glass was being collected and crushed annually on site with negotiations in place to obtain extra feedstock.

PSF provided financial assistance toward the acquisition and installation of a washing attachment to the existing infrastructure which assist Shoalhaven Recycling sell their crushed glass product to market in accordance with specifications and requirements to meet the Crushed Glass Exemption set by the EPA NSW.

Project Objectives

- To provide a local solution for the 4,500 tonnes of glass currently being recovered from businesses in Shoalhaven and other areas serviced by Shoalhaven Recycling.
- To establish local markets for the use of alternate crushed glass products such as glass sand for use in roads, pavements, pipe embedment etc.
- Production of a project report that presents information on, tonnages of glass reprocessed, local development of alternate glass markets and includes a business case incorporating cost benefit analysis, within two months post project completion.
- To promote the outcomes of project.

The Project

Initially, the project was to develop and install a glass washing attachment to the existing crusher which was in place at Shoalhaven Recycling in Bomaderry. It was soon identified that a larger machine would be required to successfully reprocess the tonnes of glass that were being received from our own collections and other contractors in the area. This resulted in Shoalhaven Recycling investing in new Glass Reprocessing equipment which they purchased from China. This purchase delayed the completion date of the project due to shipping delays. The new equipment was initially commissioned late 2011 when it was identified that some teething problems with the imported machine that needed to be sorted and the machine needed to be finetuned to be able to produce a fine product that would suitable and meet the requirements of the NSW government. This was achieved early 2012, when the equipment began full operation and is now producing a fine product for which we have established a local market in the southern Illawarra.

Markets

Shoalhaven Recycling is pleased to advise that our Recovered Glass Sand product is now being established in the local market and all reports from customers are positive.

In recent months we have established a number of new markets, as outlined in table below

Market	Tonnes per month	Annual tonnes
Shoalhaven Water		
Hillier Excavations	72	
R D Warren Excavations	130	
Wheatley's Excavations	210	
Silo's Vineyard (one off)	50	
Shoalhaven Sand	200	
TOTAL	662	7,344

Current tonnes to local civil construction markets are just over 600 tonnes of recovered glass sand per month. (6- 7k tonnes per annum).

We are confident that this figure will escalate to 10,000 tonnes plus per annum, towards the end of 2012. We have a consultant working for us who is actively seeking and securing markets for our product with civil construction companies within the Shoalhaven region.

Aside from the environmental benefits from diverting waste glass from landfill, the current and future cost savings are and will continue to be significant.

The current Waste levy for the Extended Regulated Area is \$93 per tonne, making actual landfill costs, close to \$180 per tonne to dispose glass fines. Our labour, loading and transport costs, are around \$xx.00 per tonne, providing a cost benefit of \$xx per tonne of glass fines diverted from landfill.

