

Fairfield City Council Sustainable Resource Centre

Introduction

Fairfield City Council established the Sustainable Resource Centre in 1992. It has since developed a stand-alone business unit with Fairfield City Council that returns a dividend to the council. The Sustainable Resource Centre returns C&D waste to the construction industry as new materials.

Use of recycled and re-used material

The Sustainable Resource Centre has recycled over 150 000 tonnes of material already in 2011 and is likely to recycle 170 000 tonnes by the end of the year. The Sustainable Resource Centre produces a series of new materials including crushed concrete products, recycled asphalt products and cement stabilised sands. The two key products that the Sustainable Resource Centre contributes to are 95 per cent recycled concrete and 65 per cent recycled asphalt.

Drivers and benefits

Expense into income—before 1992 Fairfield City Council sent all material from its construction and infrastructure upgrades to landfill at a cost to the council. The opportunity to reverse this cost was recognised and the Sustainable Resource Centre was established.

Saving landfill—the Sustainable Resource Centre diverts more than 100 000 tonnes of material from landfill per year. This avoids the use of the same amount of virgin materials and saves valuable land.

Recognition—Fairfield City Council won the local government award for 'Best Specific Environmental Initiative' at the United Nations of Australia's World Environment Day awards.

Problems and challenges

Recycled concrete characteristics—due to the higher cement content of recycled aggregates, recycled products absorb more water, leading to different curing times and different behavioural traits.

Contamination of material—asbestos contamination is an ongoing challenge for the recycling industry. There is currently no alternative to visual inspection at the weighbridge.

Perceptions—negative perceptions by the construction industry of recycled materials include that they are difficult to use and result in inferior constructions. These perceptions are changing as field trials show how to use these materials to their optimum performance and as virgin resources become scarcer.



Solutions

Fairfield City Council has conducted field trials of both the 95 per cent recycled concrete product and the 65 per cent-recycled asphalt. These trials have shown how to achieve optimum results using recycled materials. With regards to contamination, visual inspection is currently the best available solution.

Specifications and opportunities for other projects

Currently Fairfield City Council is using 95 per cent-recycled concrete for all non-structural applications in the council area. Results of the field trial will be available from Fairfield City Council on completion of the trial in early 2012.

The 65 per cent recycled asphalt is being used across 30 locations in the Fairfield City Council area.

Contacts and links

Fairfield City Council Sustainable Resource Centre
www.fairfieldcity.nsw.gov.au/default.asp?iSubCatID=288&iNavCatID=67

Consultation

Ross Smith, Manager Environment and Waste Operations, Fairfield City Council
Daniel Begnell, Safety Quality & Environment Coordinator, Fairfield City Council
Kerrie Whitehead, Operations Manager, Civil and Open Space, Sustainable Resource Centre

Photos

Tom Davies, Edge Environment



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