



Glass-sorter project will conquer Mount Visy

by Eloise Gibson
environment reporter

The owner of the glass stockpile that critics call "Mt Visy" will build a 120,000-tonne-capacity sorting plant to boost the rate of recycling.

Recycling company Visy announced the joint project with glass container-maker Owens-Illinois to build a glass-sorting plant next to Visy's \$21 million Onehunga recycling facility.

Spokesman Lee Smith said the sorter, combined with a glass smelter Owens-Illinois is building, would increase the amount of glass that could be used to make new bottles.

The plant will be finished early next year and will use a beam of light across a conveyor belt to sort glass into three colours for recycling at Owens-Illinois' manufacturing plant at Penrose.

The Onehunga plant takes the contents of wheelie bins — which include glass, paper and cardboard and aluminium cans — from households in Auckland and Manukau and prepares them for recycling.

The new sorter will be able to recognise 17 million glass colours and is sensitive enough to tell a Heineken beer bottle from another green bottle.

One of the problems facing wheelie-bin collectors is that glass can be broken up into small pieces that are difficult to sort into colours.

So instead of being made into new bottles, they are often ground into a sand substitute and used in footpaths or roads.

Turning used glass into bottles is generally considered better for the

environment because recycling uses less energy than making bottles from raw materials.

The glass industry has criticised Auckland's co-mingled recycling scheme because it says too much glass is broken up and contaminated during kerbside collection and sorting.

Yesterday, David Carter, chairman of the Glass Packaging Forum, said the new sorter would help.

But it was likely there would still be too little high-quality recycled glass in Auckland to service the new smelter, which is due to be built by the end of next year.

Mr Smith said the sorting equipment was from a specialist manufacturer in Europe and would be able to colour-sort 100,000 pieces of glass the size of a fingernail each minute.

It would separate glass into three main colours — white, brown and green.

The Visy plant has been under scrutiny this year after thousands of tonnes of material piled up unrecycled at its Onehunga site.

Mr Smith blamed the pile on more-enthusiastic-than-expected glass recycling efforts by Aucklanders.

He said the Onehunga pile would be re-sorted to remove paper, plastic and other material and any glass of sufficient quality would be made into new bottles.

A 12,000-tonne pile of glass next to the mixed pile could go straight to the new plant for colour sorting.



Crush it or send it overseas? That is the question facing councils trying to deal with the headache of the nation's glass, reports **Paul Easton**.

Shattering the glass ceiling

BARRY LUCINSKY believes he has the answer to the growing mountain of used glass: Crush it. He has helped design a mobile glass crusher, that can chew through tonnes of glass.

Mr Lucinsky tows the crusher, dubbed "Shatter", around the country for the Glass Packaging Forum, where it attacks glass backlogs built up at council landfills.

"It's a bloody champion," he says.

Bottles drop through a chute, and are smashed into five millimetre-wide particles by rotating spikes.

"It takes about three seconds from go to whoa."

Green, brown or clear glass, it doesn't matter to the crusher. They all become surprisingly smooth glass particles, which can be put to a variety of uses. It can be put into roading material, used in golf bunkers, or scattered under grapevines to help them grow.

The Glass Packaging Forum was formed to help groups involved in

collecting waste glass, and find alternative uses for it.

New Zealanders use about 250,000 tonnes of glass a year, of which 62 per cent is recycled.

Mr Lucinsky likes the idea of adding value to a waste product.

"Why send it to Asia? We just end up buying it back. If you just take it up the road and process them, isn't that better than sending it to China?"

Recycling glass has long been a headache for councils.

It is a flagship recycling material, yet doesn't leak any nasties into the environment if it is simply buried.

This year Central Hawke's Bay District Council decided to crush its glass and use it instead of gravel in a new landfill extension.

The crushed glass will filter toxic leachate and other liquids before it leaves the new section of landfill.

The council had collected 500 cubic metres of used glass bottles over six months, after demand for its use in roading waned.

Wellington City Council collects

13,000 tonnes of recycling each year. Of that 34 per cent is glass.

The glass is sent to AllBrite in Seaview, and either exported to Asia or processed in Auckland and made into bottles.

CitiOperations manager Mike Mendonca describes glass as "hard to handle, and hard to get rid of".

The expectation is that we will do something with this product that has an intrinsic value," he said.

"Yes we can put glass in roads, we can crush it and even use it as sand on beaches. But you have to be careful because to get it to that point takes a lot of energy."

Wellington City Council has access to two quarries that provide cheap road-seal material.

"Yes, we could put glass in the roads, but it would be a lot more expensive.

"We are looking for a balance between cost and the environment and that's always the challenge for recycling."



► **USES FOR CRUSHED GLASS**

■ **Golf bunkers:** Three top Christchurch golf clubs - Harewood, Windsor and Waitikiri - are participating in "glass sand" trials. It is hoped glass won't blow away as much as sand does.

■ **Roading:** Transit New Zealand allows up to five per cent crushed glass to be used in roading mix.

■ **Agricultural mulch:** The reflective properties of crushed glass can quicken the ripening process when it is scattered under grape vines.

■ **Sandblasting:** Abrasive crushed glass is a good substitute for sand when blasting. As blasting is not colour sensitive, there is no need to sort the glass.



'It takes about three seconds from go to whoa.'

Barry Lucinsky of his mobile glass crusher - dubbed "Shatter" - which can chew through tonnes of glass.

Photo: ANDREW GORRIE



Crusher shatters tonnes of glass

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