

30 May 2024

fyi-request-26603-6782f0ea@requests.fyi.org.nz

Kia ora Stefan,

## **Recycling**

Thank you for your request made under the Local Government Official Information and Meetings Act 1987 (the Act), received on 2 May 2024. You requested the following information:

1. How exactly is recycling sorted in Wellington, i.e. what's sorted by hand, by machine, and how exactly is this done?
2. What happens to items that are put into the recycling incorrectly? Including items that are recyclable but 'shouldn't' be put into the recycling like crushed cans, soft plastic, food-soiled cardboard, etc.
3. Are entire bags of recycling put into the landfill because of one or two items that shouldn't be in the recycling bin, or are only the offending items separated out?
4. What statistics do you have on volumes of recycling wastage, including detailed statistics on the types of items and how they were separated out?
5. What internal communications, reminders or memos do you have on recycling, including changes in approach or policy to items that should or shouldn't be recycled?
6. Under what circumstances and how frequently is sorted recycling redirected to landfill, e.g. when recyclers don't have capacity? Or are all recyclable items always stored until a suitable recycler can be found?

Wellington City Council has granted your request for information.

### **1. How exactly is recycling sorted in Wellington, i.e., what's sorted by hand, by machine, and how exactly is this done?**

Once collected from kerbside, Wellington's mixed recycling (paper, cardboard, cans, tins, and plastic) is sent to the Oji Fibre Solutions Materials Recovery Facility (MRF), in Seaview. The collection trucks dump the recycling on the floor and a front loader lifts it onto an infeed conveyor.

The infeed conveyor takes loose material up to a presort table where staff manually separate large cardboard boxes and remove rubbish. Bagged recycling is sent down a separate line and passes through a bag opening machine before it is fed back on the infeed conveyor and back over the presort table.

After presort, the recycling material passes over two large automatic Star Screens (incline tables with banks of spinning rubber star shaped wheels) – where two dimensional items (paper and cardboard) are directed up and onto the paper conveyors, and three dimensional items are directed down to the containers conveyor. Separated paper/cardboard items are manually checked for flat containers and waste soft plastics before they are baled for shipment to Penrose Mill in Auckland or Kinleith Mill in Tokoroa. The containers are conveyed towards a large hopper, and on the way, a magnet removes steel cans. Once the containers are loaded into the hopper, two augers send the containers up to the optical sorter where they are sent down one of four optical sorting lines. These optical sorting lines are fitted with scanners which

use photo imagery, refraction, and ferrous metal sensors to determine which cage to eject the container into, and the containers are ejected off the line by a jet of air.

The containers are collected in galvanised steel cages and then baled for sale to local and international buyers.

There is a short video on [this page](#) that includes footage of sorting machinery at the MRF. There is also an older [video](#) of the sorting process at the MRF, though there have been changes to the process since this was filmed.

Glass recycling is sorted by hand as it is collected at the kerb. Our contractors sort it by colour into the three separate sections of the truck (green, brown, and clear). Any unacceptable items are left behind, with a sticker to explain why they weren't collected. Glass is dropped off to the MRF, into separate-coloured piles, it is then packed and trucked to Auckland for recycling back into bottles and jars, at Visy.

## **2. What happens to items that are put into the recycling incorrectly? Including items that are recyclable but 'shouldn't' be put into the recycling like crushed cans, soft plastic, food-soiled cardboard, etc.**

If recycling bags are clearly badly contaminated, they will not be collected from kerbside by our contractors. They will be stickered to explain why they were not collected. When this happens our audit team receive notification and go to investigate. Their intention is to find the address it came from and educate them on what to do next time.

Uncollected, heavily contaminated bags either get taken back in and sorted out by the residents who put it out or collected and sent to landfill by our auditors if the responsible person cannot be found.

In the case of recycling bins, contamination is harder to spot so incorrect items and contaminated items do get through.

At the MRF, anything dirty, undersized, oversized, or unrecyclable - gets removed by manual sorters and machinery, these items then get sent to landfill. Hazardous items such as needles and gas bottles, are disposed of safely.

## **3. Are entire bags of recycling put into the landfill because of one or two items that shouldn't be in the recycling bin, or are only the offending items separated out?**

This depends on the type of items. Contamination is a spectrum, with some items being far worse than others, for example, food and nappies are particularly bad as they can contaminate other recyclables. If a bag clearly has some of these items in it, then it will be left at the kerb. Bags with one or two incorrect items such as soft plastics or tetra pak will generally not be left at kerbside. While this level of contamination is not ideal, it is manageable.

If a bag is collected at kerbside, its contents will be sorted at the MRF.

The only time material collected wouldn't be sorted is if the whole truck load is contaminated. A truck load of recycling can be diverted to landfill if there are contaminants that have spread through the truck –for example, nappies, containers of food or engine oil. Because there are compactors in the trucks, things like these can burst and spread.

It is very rare for a full truckload to be landfilled.

It is inevitable that incorrect items and contaminated items end up at our MRF, they are separated out and sent to landfill, or otherwise safely disposed of - as mentioned in previous question.

**4. What statistics do you have on volumes of recycling wastage, including detailed statistics on the types of items and how they were separated out?**

The MRF provides us with a monthly report containing the total volume of recycling and the percentage and weighted split across the different grades, including the percentage of that recycling that is deemed to be waste. The waste portion can be made up of contaminated recycling such as dirty materials that, if not contaminated with dirt/food etc, would have been represented in the appropriate grade of material, or materials/items that are not accepted as recycling e.g., a plastic number 6.

The split of material is established by scoop test. The MRF takes a scoop of the recycling when it is tipped out of the truck and manually hand sort that into the various grades. The reporting we receive from our contractor contains commercially sensitive information pertaining to their operations and end markets and can't be shared. Reporting data on volumes/grades for the 23FY has been extracted and is attached.

**5. What internal communications, reminders or memos do you have on recycling, including changes in approach or policy to items that should or shouldn't be recycled?**

Various channels are used to communicate recycling messaging, including the WCC website, social media channels (Facebook, Instagram, TikTok), Our Wellington magazine, and media releases.

Webpages:

[What can go in kerbside recycling - Sorting your rubbish and recycling - Wellington City Council](#)

[Where your recycling goes - Sorting your rubbish and recycling - Wellington City Council](#)

[What to do with your waste - Sorting your rubbish and recycling - Wellington City Council](#)

A downloadable A4 guide is available on our website. A5 recycling guide magnets are available at the Arapaki Service centre, and selected community centres. These magnets are distributed at workplace and community engagement sessions and also to new homeowners/renters via selected real estate companies.

On Feb 1 this year, the items accepted for kerbside recycling were standardised across the country by the Ministry for the Environment (MfE). This meant little change for Wellington, aside from minor changes to size limits, as materials collected at kerbside were already consistent with standardisation. Items that are and aren't accepted for recycling is not expected to change in the near future, any policy changes in this area will come from central government.

Detailed requirements for what materials are accepted in council managed kerbside recycling collections can be found on the [New Zealand Gazette](#) website.

This [guidance document](#) provides further explanatory detail on the kerbside standard materials changes.

[Recycle right at kerbside](#) has information for the general public on what can go into kerbside recycling nationwide, as of 1 February 2024.

When standardisation came into effect, WCC published google ads, a media release, and had billstickers put up around the city to reinforce correct recycling practices.

**6. Under what circumstances and how frequently is sorted recycling redirected to landfill, e.g., when recyclers don't have capacity? Or are all recyclable items always stored until a suitable recycler can be found?**

We are not aware of any instances where sorted recycling is directed to landfill. Additionally, the materials listed in MFEs standard set of materials have been included because they have strong and sustainable end markets.

Please note, we may proactively release our response to your request with your personal information removed.

Thank you again for your request,

Kind regards

**The Assurance Team**  
assurance@wcc.govt.nz