

WASTE SAMPLING PROCEDURE

The facility is a notified Materials Facility and is required to undertake regular sampling of both incoming and outgoing waste material as stated in Part 2, Chapter 2 of Schedule 9 of the Environmental Permitting (England and Wales) Regulations (Amendment) 2023 (INSERT REFERENCE).

Incoming waste is considered as 'waste material' under the Regulations as it meets the following criteria:

- Although the waste comes from a wide range of commercial sources (offices, retail, hospitality), it is similar to household waste in nature and composition
- It is separately collected for the primary purpose of preparing for reuse or recycling
- It consists of both single stream and multiple stream materials
- It contains one or more material types including glass, metal, paper, card, plastic and fibre based composite materials

The waste materials are separated into separate material streams which include glass, metal, paper, card, plastic and fibre-based composite materials and these are considered to be 'specified output material'.

Suppliers

The majority of incoming waste material is delivered to the facility in Recorra Ltd's own waste collection vehicles, with very occasional deliveries from other trade organisations, and so for the purposes of the Regulations, it is considered as single supplier, Recorra Ltd.

Variation and seasonality

The composition of waste materials collected is consistent and there is little variation between incoming loads month on month. There is a small degree of seasonality with fewer materials collected in August and December. A slightly higher proportion of glass is collected in December.

Input material types and target materials

Recorra accepts all the 10 input material types identified in the Regulations and has identified which of these are target materials, non-target materials and non-recyclable materials. These are shown in the table below:

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	TARGET MATERIALS	NON-TARGET	NON-RECYCLABLE
Glass	Glass bottles	Sheet glass	Pyrex
Aluminium	Aluminium cans (drinks containers) Foil (packaging)	Other metal (non-ferrous)	Severely contaminated cans
Steel	Food cans Cutlery, reusable drinking bottles	Other metal (non-ferrous) CO2 cannisters	Severely contaminated cans
Paper	SOW, newspaper, white tissue		Paper or tissue contaminated with food
Card	Boxes Shopping bags		Cardboard contaminated with food residue
Plastic Bottles	Drinks bottles (PET only 50 ml - 3 litres)		Plastics contaminated with food residue
Plastic Pots, Tubs & Trays			Plastics contaminated with food residue
Film, Other Flexible Plastic	Plastic sacks, bags, film	Crisp packets Sweet wrappers	Plastics contaminated with food residue
Other Plastic	Rigid plastic	Coffee cup lids Bottle tops	Plastics contaminated with food residue
Fibre Based Composite	Coffee cups, cartons/tetrapak, vegware		Cups or cartons contaminated with food residue
		WEEE, vapes, batteries	Food or liquid
			General waste, incl blue tissue

Input Material Sampling

Input material samples are taken from the dry mixed recycling and cardboard streams. The dry mixed recycling stream consists of mixed materials collected together (aluminium and steel cans, paper, card, plastic bottles, pots, tubs, trays and cartons) as well as some smaller

quantities of paper, metal and plastic which are collected separately, but then mixed with the dry mixed recycling stream before processing.

The cardboard input stream is collected as source separated, baled material. Some other relevant waste materials are separated at source and collected as single stream materials however the decision has been made to exclude these from input material sampling for the following reasons:

- **Glass** – most of the glass collected by Recorra is taken directly to a third-party site. Any remaining glass collected and brought back to the facility is identified and kept apart. Glass is received from a single supplier (Recorra Ltd) and is simply bulked, to be transferred direct for reprocessing. There is no change to the composition of the material. There are also health and safety concerns around sampling glass.
- **Paper collected for secure destruction** – it is not possible to sample this material without breaching the secure destruction protocol
- **Paper towels** – collected as a source separated stream and only basic sorting carried out (removal of contaminants)
- **Large or heavy metal or plastic items** – typically collected as part of a clearance and which might damage sorting equipment
- **Fibre based composite** (cartons, coffee cups and compostable packaging - vegware) - collected as source separated streams and only basic sorting carried out (removal of contaminants)

Output Material Sampling

Output material samples are taken from the metal (aluminium and steel), paper, card, plastics and fibre based composite streams.

Output sampling is not carried out on the following materials:

- **Paper collected for secure destruction and subsequently shredded** – the shredded material particles are too small for adequate sampling
- **Compostable packaging** (vegware) - this material undergoes basic sorting (as described above) before being stored in an enclosed compactor, bulked up and transferred direct to a re-processor. The nature of this material means that it is likely to be heavily contaminated with food.

Although not required under the scope of the Regulations, residual waste is also sampled as good practice.

Collection and Storage of Materials for Sampling

Collection of waste materials for sampling will only take place inside the facility. Materials collected for sampling are placed inside orange-coloured 1100 litre wheeled bins and are stored next to the sampling area while awaiting sampling. The orange bins are not used for any other purpose so as to prevent samples getting cross contaminated with materials from other sources.

In general, samples are collected and analysed immediately, or later the same day, and so are not stored for any period of time. If there is likely to be any delay between the sample being collected and then analysed, the bins containing the samples are clearly labelled with the date and time, material type and sample weight.

Sampling is only carried out by trained operatives. Only one sample is tested at a time.

Staff Training

Only operatives who have been suitably trained carry out sampling. A visual guide has been created to assist operatives in identifying target, non-target and nonrecyclable material and which of these are also packaging or drinks containers.

Sampling process

A designated area for measuring samples has been established inside the facility. This is located near to the main MRF but away from moving equipment and vehicles. The area is, however, accessible by forklift truck which can be used to lift and move materials, as required.

The sampling area contains both platform scales for measuring larger quantities of materials, and bench scales for measuring smaller quantities such as separated material fractions. All scales are calibrated annually (calibration records are available). The area also contains a custom-built sampling table with an in-built steel mesh screen measuring 50 mm in in any one direction.

Incoming DMR stream

This material stream consists of both loose and bagged materials and is contained within a designated bay. The operative undertaking the sampling select both loose and bagged materials for sampling, ensuring they collect a range of bag sizes and weights. The operative takes one of the following approaches when selecting material for sampling, in order to achieve a representative, randomised sample:

- Materials will be taken from different parts of the material pile, using the 'points of the compass' technique, OR
- Materials will be taken from a random whole section of the material pile

Material is collected until the required sample weight is achieved. The materials are placed in an orange sampling bin and the total sample weighed using platform scales to:

- a) ensure the sample weight meets the requirements of the Regulations and
- b) to cross check the weight of the sorted materials.

After weighing, the bin containing the sample is emptied onto a small conveyor where two operatives positioned on either side of the conveyor, open the bags and sort and separate the materials into the 10 input material types (see Table X). The separated materials will be placed into smaller labelled bins beside them.

Any remaining materials (including material particles) which do not fall into any of the 10 input categories, pass along the conveyor and drop into a separate bin. The contents of this bin is passed over the fines screen in the sampling area and the weight of the material particles and other materials, recorded on the sampling sheet.

The smaller bins containing the 10 input material types are also be taken to the sampling area and each material type further separated to determine the proportion of target, non-target and non-recyclable material, including which of these are also packaging or drinks containers.

All separated materials are weighed using platform or bench scales and the results recorded on the sampling sheet. (At the current time, the conveyor used to separate the materials is located some meters away from the sampling area where materials are measured. There are future plans to move the sampling area closer to the conveyor to create a more streamlined process.)

Baled Cardboard

Incoming bales are selected at random for sampling. Bales are cut open, and the operative either samples the entire bale, depending on its size, or gathers material from different sections of the bale until the required sample weight is achieved.

In accordance with the regulations, one 60kg sample will be taken for every 75 tonnes of waste material received.

Specified output material

Samples of output materials are collected from the sorted material bunkers located underneath the MRF processing equipment. Samples are gathered by mobile plant such as a telehandler or 360 machine and deposited directly into an orange sampling bin.

Samples are analysed using the same process as detailed above for input materials. After samples have been measured, the sampling area is cleared in preparation for measuring the next sample.

Target materials are placed back in the dry mixed recycling bay or sorted material bunkers, as appropriate, and other materials in the residual bay.

Data Recorded on Sampling Sheet

The sampling sheet is used to record data points include, but are not limited to the date, time, type, grade and weight of the material being sampled.

All relevant incoming materials are collected and delivered into the facility by a single supplier – Recorra Ltd - so this information is not recorded separately. For the same reason, the vehicle registration and incoming weighbridge ticket number is not recorded on the sampling sheet. This information is available separately, if required.

Sampling Schedule

A sampling schedule has been established to ensure that materials are sampled at the correct frequency. Material samples are taken at different times and on different days of the week in order to achieve randomised samples. The schedule is reviewed on a quarterly basis to accommodate projected delivery tonnages and production figures.

Combined waste returns for material facilities

As required by the Regulations, sampling data is submitted to the Regulator each quarter for both input materials and specified output materials.

Document Control

Revision Date	Issue	Reviewer	Summary of Changes	Affected Pages
27/10/2025	1	PH	Review, no changes	All