Technical, Environment, Economic, Practical (TEEP) Assessment

Should be read with guidance on collecting paper and card with other dry recyclable waste

Name of waste collector or waste collection authority

Hills Waste Solutions

Waste carrier number

CBDU79226

Number of written assessments completed by organisation

2

Geographical area and premises covered does this written assessment cover?

Hills Waste Solutions (HWS) operate 4 commercial waste collection depots.
This TEEP assessment is for 1 of those depots located at Hallen. Waste Collection services are offered across North Somerset, Bath & Northeast Somerset and Gloucestershire.
HWS occasionally uses brokers and sub-contractors to collect waste across the same area.
HWS collects from Businesses, residential homes, educational establishments, hospitals & nursing homes, places of worship, peal institutions, charity shops, hostels, premises used for public meetings.

Mixed dry recyclable waste will be collected with paper and card

Mixed Dry Recycling include Cardboard and Paper, empty food and drink cans inclusive of empty aerosol cans, empty plastic pots, tubs and bottles as well as clean glass.

Non-recyclable material and food is collected separately.

Exceptions for Collecting Mixed Recyclable

Technical, economic & environmental

1. Collecting separately is not 'technically practicable'

The current refuse collection fleet is not equipped to collect separate waste streams simultaneously. Fleet upgrades will be strategically planned as new, compatible vehicles become available on the market.

Once the fleet is upgraded, additional training will be necessary for operatives to ensure they meet the requirements for handling and managing separate collections effectively.

The Hills Waste Solutions (HWS) Material Recycling Facility (MRF) is specifically designed to process mixed dry recyclable waste. The facility separates materials such as paper, cardboard, various metals, and different types of plastics. These separated waste streams are baled and dispatched for further processing by recycling partners. Introducing pre-separated fractions into the system may result in smaller batch sizes, potentially reducing the plant's overall operational efficiency. Furthermore, implementing such changes would necessitate additional training for operatives to adapt to new workflows and handling procedures.

On occasion, the HWS fleet utilizes third-party transfer stations with similar configurations to the HWS MRF.

Current collection routes are optimized to maximize operational efficiency. Introducing additional collections from the same locations would place added logistical pressures on the fleet, requiring adjustments to routing and scheduling to maintain efficiency.

Space constraints for customers also pose a challenge. Separate collections would necessitate the use of multiple bins, which may lead to storage issues. In some cases, this could result in bins being stored outside customer premises, potentially creating a nuisance.

Type of data & analysis

We have used internal data based on the makeup of the vehicle fleet, operating parameters of the MRF, the current training matrix for operatives and customer requirements.

2. Collecting separately is not 'economically practicable'

The current Hills Waste Solutions (HWS) fleet is not equipped to collect multiple waste streams simultaneously.

Implementing the collection of separated recyclable fractions would require additional lifts and vehicles to meet customer requirements, significantly increasing operational demands. In addition, Bristol charges a congestion fee, the additional vehicles required for the segregated collections would attract congestion charges.

The cost of a single refuse collection vehicle (RCV) exceeds £250,000, while electric RCVs can cost over £450,000. Additionally, compliance with Operator's Licence (O Licence) regulations, alongside associated costs for vehicle parking, maintenance, and

labour, would further escalate the overall expense of waste collection services. These increased costs would ultimately need to be passed on to customers.

Type of data & analysis

Analysis completed by HWS based on fleet and operational costs completed by the organisation compliance department.

3. Collecting separately has 'no significant environmental benefit'

HWS currently take mixed recyclable waste to a large state of the art MRF in Avonmouth to separate waste fractions which are bailed and/or bulked for onward transport. The third-party state of the art facility mechanical separates glass, metals, plastics, paper and cardboard.

Type of data & analysis

Separately collected waste fractions and mixed fractions would be delivered to the same facility for baling and onward transportation. This process would utilize the same facility process the same volume of waste and consume the same amount of energy.

The collection of separate waste fractions would lead to an increase in vehicle movements.

Refuse Collection Vehicles (RCVs) consume approximately 0.3 litres of diesel per km, generating 0.76 kg of CO2/km. This corresponds to approximately 0.01 kg of CO2 per kg of waste collected under the current system. With the existing fleet setup, separate waste collections could result in emissions increasing to approximately 0.03 kg of CO2 per kg.

Authorisation

By typing your name, you confirm that the information you have given is correct.

Name

Robin Edwards

Job title

Environment & Quality Manager

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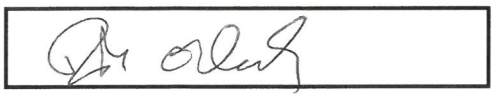
Signature



Date

5th September 2025

Date of next review

4th September 2026