



Government of **Western Australia**
Department of **Water and Environmental Regulation**

Container Deposit Scheme

Bottle Crushing Material Recovery Facilities – Approved
Methodology

Department of Water and Environmental Regulation

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1 About this document

This document sets out the approved methodology referred to in regulation 4ZJ(1)(ii) of the Waste Avoidance and Resource Recovery (Container Deposit Scheme) Regulations 2019 (Regulations), which may be applied in determining the amounts payable to material recovery facility (MRF) operators carrying on a bottle crushing service business.

This approved methodology should be read in conjunction with the material recovery (bottle crushing) agreement which describes contract terms and conditions between MRF operators and the Scheme Coordinator for recovery amount payments.

2 Definitions

Terms within this approved methodology have the same meaning as defined within the *Waste Avoidance and Resource Recovery Act 2007* (the Act) and the Regulations.

Abbreviations and definitions

claimed scheme material	Means any containers in respect of which a Refund Amount or Recovery Amount has already been claimed
quarter	<p>(a) Subject to paragraph (b) of this definition, the following periods in the year:</p> <ul style="list-style-type: none"> • 1 July to 30 September; • 1 October to 31 December; • 1 January to 31 March; and • 1 April to 30 June, <p>inclusive of the start and end dates.</p> <p>(b) The first quarter is the period from 1 October 2020 to 31 December 2020.</p>

3 Available methods for recovery amount claims

A MRF operator may make a claim for the payment of a recovery amount by lodging a claim with the Scheme Coordinator in the approved form and manner, in accordance with the material recovery (bottle crushing) agreement.

One of the following methods must be used for estimating the total number of eligible containers processed for reuse or recycling by the MRF operator during any given quarter:

- 1) weighing method as per section 4.1.1
- 2) exact count as per section 4.1.2

A MRF operator must nominate to the Scheme Coordinator whether they will use the exact count method or the weighing method for the output material.

3.1 Weighing method

Each MRF operator using the weighing method must measure and record the quantity of the output material, excluding any claimed scheme material, that is delivered from the MRF for reuse or recycling.

The quantity of the output material delivered from the MRF must be determined by measuring the weight of the material using calibrated weighing equipment and in accordance with the following:

- The weight must be measured in kilograms;
- The weight must be measured using calibrated weighing equipment and recorded to the calibrated resolution for the equipment in use (e.g. for weighbridges +/- 20 kilograms);
- The date of delivery and destination of each load delivered from the MRF must be recorded;
- Weighing equipment must be calibrated in accordance with all manufacturer requirements; and
- Weighbridges, where used as weighing equipment for the purpose of this Section, must be verified (within the meaning of the *National Measurement Act 1960*) at least once a year.

3.2 Exact count

Each MRF operator using the exact count method must count the number of individual eligible containers, excluding any claimed scheme material, delivered from the MRF for reuse or recycling.

Counting must be undertaken on an automated basis, and the barcode of each container that enters the bottle crushing machine must be scanned and recorded to determine the proportion of eligible containers.

To provide a verification mechanism, the weight of the output material delivered from the MRF must be measured using calibrated weighing equipment and in accordance with the following:

- The weight must be measured in kilograms;
- The weight must be measured using calibrated weighing equipment and recorded to the calibrated resolution for the equipment in use (e.g. for weighbridges +/- 20 kilograms);
- The date of delivery and destination of each load delivered from the MRF must be recorded;
- Weighing equipment must be calibrated in accordance with all manufacturer requirements; and
- Weighbridges, where used as weighing equipment for the purpose of this Section, must be verified (within the meaning of the *National Measurement Act 1960*) at least once a year.

3.3 Output material type

Under the approved methodology, glass is the only output material delivered from the MRF for the purpose of reuse or recycling.

4 Calculation of recovery amount claims

The amount payable by the Scheme Coordinator to a MRF operator must be determined using the calculations detailed below.

4.1 Number of eligible containers

4.1.1 Weighing method

Where a MRF operator makes a recovery amount claim using the weighing method, the Scheme Coordinator must determine the estimated number of eligible containers processed for reuse or recycling during the quarter using the following calculation:

$$E = Q \times EF$$

Where:

E is the estimated number of eligible containers processed for reuse or recycling during the quarter.

Q is the total weight of output material measured in kilograms delivered from the MRF for reuse or recycling during the quarter, excluding any claimed scheme material.

EF is 2.35 eligible containers per kilogram, which reflects the pre-scheme baseline statewide average eligible container factor for glass processed through municipal solid waste material recovery facilities.

4.1.2 Exact count

Where a MRF operator makes a recovery amount claim using exact count, the number of eligible containers processed for reuse or recycling during the quarter will equal the total exact count number of eligible containers delivered from the MRF for reuse or recycling during the quarter, excluding any claimed scheme material.

4.2 Total recovery amount payable

4.2.1 Weighing method

If the weighing method is used, the Scheme Coordinator must calculate the total recovery amount payable to a MRF for each quarter using the following calculation:

$$P = E \times RA$$

Where:

P is the Total Recovery Amount Payable to the MRF operator for the quarter.

E is the estimated number of eligible containers processed and delivered for reuse or recycling during the quarter, determined in accordance with section 4.1.1.

RA is the recovery amount per eligible container.

4.2.2 Exact count

If the exact count method is used, the Scheme Coordinator must calculate the total recovery amount payable to a MRF for each quarter using the following calculation:

$$P = N \times RA$$

Where:

P is the Total Recovery Amount Payable to the MRF Operator for the quarter.

N is the number of eligible containers processed and delivered for reuse or recycling during the quarter, determined in accordance with section 4.1.2.

RA is the recovery amount per eligible container.