

# Mass balance monthly reporting for waste depots – instructions

Issued March 2021

## Introduction

This document provides an overview of the Detailed Data File format and the data types used for the mass balance reporting comma separated value (CSV) upload.

The Detailed Data File uses a comma separated value (CSV) file format, records with variable lengths, with fields separated or delimited by the ',' (comma) character.

Each file may contain multiple records, which in turn will contain one or more fields as prescribed within this document for the type of record.

## CSV file format conventions

- 1 Fields must be separated or delimited by the comma character (ASCII/, =0x2C).
- 2 Each record must end with an end-of-record (EOR) control character ';' (comma) is the accepted EOR control characters.

### Example

```
Materials-in,Green waste - vegetation or garden organics,Onsite weight,4.500,Commercial and industrial waste (C&I),Metro,,,,,
```

```
Materials-in,Green waste - vegetation or garden organics,Onsite weight,3.600,Commercial and industrial waste (C&I),Metro,,,,,
```

- 3 Two consecutive field delimiter indicate null fields
- 4 Must have double quotes (ASCII/, =0x22), around the text to pick up the multiple lines, i.e. when there is a newline or carriage return inside the values.
- 5 Must have double quotes (ASCII/, =0x22), around the values with hyphen (ASCII/, =0x2D).
- 6 Must have double quotes (ASCII/, =0x22), around the values with comma (ASCII/, =0x2C).

### Example

Materials-out,E-waste,Offsite weight,1200,,,Recovered resource,"computers,tablets,mobile phones are discarded are sent to the recycling facility - SA",SA,,,

In the above example, Material type (e-waste) is a pre-defined value without double quotes and is a valid record. Further information is a free text and thus requires double quotes to make it a record.

- 7 Must not have blank lines between every record.
- 8 The Data File must have one header record on the first line with all columns.

### Scenario

The facility did not use any materials for the operational purpose in the reporting period. The header row to include all the columns:

MaterialFlow,MaterialType,MassDetermination,MassTonnes,Stream,MetroNonMetro,MaterialFate,FurtherInformation,Destination,EPAApprovedReference,UseDescription,

Note: If a hyphen is intended to be used within other areas of the upload document (i.e. free text) – ensure that they remain as a small hyphen and not change to an extended hyphen (special character). If an extended hyphen is used, data uploaded will appear like 'Contaminated waste â€ low level' instead of the expected 'Contaminated waste - low level' within the mass balance application.

- 9 The three different record types can be in any order with the header record on the first link.

### Note

If a hyphen is intended to be used within other areas of the upload document (ie free text) – ensure that they remain as a small hyphen and not change to an extended hyphen (special character). If an extended hyphen is used, data uploaded will appear like 'Contaminated waste â€ low level' instead of the expected 'Contaminated waste - low level' within the mass balance application.

## Data types used within the Detailed Data File

### String

The string data type can contain alphanumeric values (alphabetic and/or numeric characters) including 'leading' characters, eg '01','02','03'. String fields should only be the size of the meaningful data and must not contain leading or trailing spaces unless required as part of the actual value.

### Number

The number data type contains sequence of numeric characters which may contain a decimal point (if required), excluding leading characters, eg '053', and include all decimal places, eg '053.000' when specified.

### Detailed Data File format

The Detailed Data File will account for transactions of the movement of waste and other material into(ins), out of (outs) and remaining permanently (used for operational purpose) within the site for the reporting calendar month.

The file has a mix of record types as listed below.

**Record type overview**

Record type code	Purpose	Number of rows allowed
MaterialFlow	This is the header record, identifies the columns in the file	1
Materials-In	This is the transaction for the movement of waste or other material that has come onto the site	0 or more
Materials-Out	This is the transaction for the movement of waste or other material that has left the site	0 or more
Operational use	This is the transaction for the waste or other material used for operational purpose	0 or more

**Data File name**

The csv file name can be any format

For example: <Licence number\_MBR\_YYYYMMDD.csv>

**Header Record**

MaterialFlow,MaterialType,MassDetermination,MassTonnes,Stream,MetroNonMetro,MaterialFate,FurtherInformation, Destination,EPAApprovedReference,UseDescription,

**Waste or material in, out or operation use record**

Column name	Data type	Max size	Null allowed	Values	Description
MaterialFlow	String	NA	No	Pre-defined	This field defines what part of the mass balance equations the data relates to.
MaterialType	String	NA	No	Pre-defined	The material type must be selected from the EPA material types as listed in the Validation Tables (as referenced from the Waste reporting, record keeping and measurement standard). This will required depots to configure their site specific classification with the EPA material types in their own systems to meeting the requirements of this field.

Column name	Data type	Max size	Null allowed	Values	Description
<b>MassDetermination</b>	String	NA	No	Pre-defined	This field defines the method that was used to determine the mass of the selected material.
<b>MassTonnes</b>	Number	NA	No	Format [0.000]	The mass of the particular material type
<b>Stream</b>	String	NA	Yes When not a Materials-Out or Operational use	Pre-defined	The waste stream defined the source of the waste. A stream must be selected from one of the five options as listed in the Validation Tables.
<b>MetroNonMetro</b>	String	NA	Yes When not a Materials-Out or Operational use	Pre-defined	This details the origin of the waste
<b>MaterialFate</b>	String	NA	Yes When not a Materials-In or Operational use	Pre-defined	Details if the material is either 'Transferred waste' requiring further treatment or a 'Recovered resource' ready for use.
<b>FurtherInformation</b>	String	0–255	Yes Can be optionally included for 'Materials-out' record	Any Value within Quotes	This is a free text field for providing more information about the material type particularly to further clarify the intended fate of a recovered resource.
<b>Destination</b>	String	NA	Yes When not a 'Materials-in' or 'Operational use' record	Pre-defined	Details of where the material will be transported to directly after leaving the depot. This may not be the final destination of the material.

Column name	Data type	Max size	Null allowed	Values	Description
EPAApprovedReference	String	NA	Yes Can be optionally included for 'Operational use' record	Pre-defined	If an 'approved operational use declaration' is obtained from the EPA the relevant reference number should be provided.
UseDescription	String	0-255	Yes When not a 'Materials-in' or 'Materials-out' record	Any Value within Quotes	Used to describe the purpose of the operational use, e.g. road construction

**Example of a Data File**

Scenario	Sample record
Materials-out record	Materials-out,Aggregate/rubble/sand,Onsite weight,10.2,,,Recovered Resource,,SA,,,
Materials-out record	Materials-out,Green waste-vegetation or garden organics, Onsite weight,1591.38,,,Transferred waste,,SA,,,
Materials-out with optional value	Materials-out,Aggregate/rubble/sand,Onsite weight,11.211,,,Recovered Resource,"Used as bedding material for sewer and water pipes, drainage material,decorative pathways & garden beds. DENSITY Approx. 1.5t to m3 (7-14mm)",SA,,,
Operational use record	Operational use,Waste fill,Onsite weight,45.512,,,,,"Road construction",
Operational use record with optional value	Operational use,Waste fill,Onsite weight,45.512,,,,,"Reference number: 1234xx","Road construction",
Materials-in record	Materials-in,Cardboard,Offsite weight,43.094,Commercial and industrial waste (C&I),Metro,,,,,,
Materials-in record	Materials-in,Green waste - vegetation or garden organics,Onsite weight,610.981,Commercial and industrial waste (C&I),Metro,,,,,,
Materials-in record	Materials-in,Green waste - vegetation or garden organics,Conversion factor,101.5,Municipal solid waste (MSW),Metro,,,,,,
Materials-in record	Materials-in,Mixed waste - self-haul/drop-off,Conversion factor,150.306,Municipal solid waste (MSW),Metro,,,,,,

## Field validations

Below are the values by column headings:

MaterialFlow
Materials-in
Materials-out
Operational use

MaterialType
Abattoir waste (including meat rendering)
Aggregate/rubble/sand
Ash (other than fly ash)
Asbestos
Used asphalt
Battery - lead acid
Battery - other
Biosolids or manures
Bricks
Cardboard
Carpet
Ceramics/pottery
Clinical and related waste
Co-mingled recyclables
Compost
Contaminated waste - high level
Contaminated waste - intermediate
Dredging spoil
E-waste
FOGO - food organics/garden organics
Food organics
Foundry sand
Glass

<b>MaterialType</b>
Green waste - vegetation or garden organics
Insulation
Listed waste
Masonry
Mattresses
Metals - mixed
Metals - aluminium
Metals - non-ferrous
Metals - steel/ferrous
Mixed waste - commercial bins
Mixed waste - kerbside
Mixed waste - hard waste
Mixed waste - residuals
Mixed waste - self-haul/drop-off
Mixed waste - skip bin
Mulch
Quarried materials, eg gravels
Onsite excavated
Paper/cardboard - mixed
Paper
Plasterboard
Plastics - mixed
Plastics - soft/film
Plastics - hard
Polystyrene
Quarantine waste
Radioactive waste
Reclaimed asphalt pavement (RAP)
Refuse Derived fuel/Solid recovered fuel
Road profilings
Shredder floc

<b>MaterialType</b>
Soil amendments
Soils - high level contaminated
Soils - low level contaminated
Soils - intermediate
Street sweepings
Textiles
Timber (excluding trees)
Tyres
Waste derived fill
Waste fill
Waste fines
Waste grease/oils/fat (including liquid organics used in composting)
Whitegoods

<b>MassDetermination</b>
Onsite weight
Offsite weight
Conversion factor

<b>Stream</b>
Municipal solid waste (MSW)
Commercial and industrial waste (C&I)
Construction and demolition waste (C&D)
Hazardous waste
Other

<b>Metro/non-metro</b>
Metro
Non-metro

MaterialFate
Transferred waste
Recovered resource

Destinations
SA
VIC
NSW
WA
NT
TAS
QLD
ACT
International

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## Further information

### Legislation

[Online legislation](#) is freely available. Copies of legislation are available for purchase from:

Service SA Government Legislation Outlet  
 Adelaide Service SA Centre  
 108 North Terrace  
 Adelaide SA 5000

Telephone: 13 23 24  
 Facsimile: (08) 8204 1909  
 Website: [shop.service.sa.gov.au](http://shop.service.sa.gov.au)  
 Email: [ServiceSAcustomerservice@sa.gov.au](mailto:ServiceSAcustomerservice@sa.gov.au)

### General information

Environment Protection Authority  
 GPO Box 2607  
 Adelaide SA 5001

Telephone: (08) 8204 2004  
 Facsimile: (08) 8124 4670  
 Freecall: 1800 623 445 (country)  
 Website: <https://www.epa.sa.gov.au>  
 Email: [epainfo@sa.gov.au](mailto:epainfo@sa.gov.au)