

Food Surplus and Waste Measurement and Reporting Guidelines: Dairy Processing - September 2018

WRAP and UK food businesses have agreed some common guidelines for measuring and reporting on food surplus and waste, consistent with the global [Food Loss and Waste Accounting and Reporting Standard](#) (FLW Standard). These have been produced in support of the [UK Food Waste Reduction Roadmap](#) – to help the UK meet the Sustainable Development Goal (SDG) 12.3 target to halve food waste by 2030.

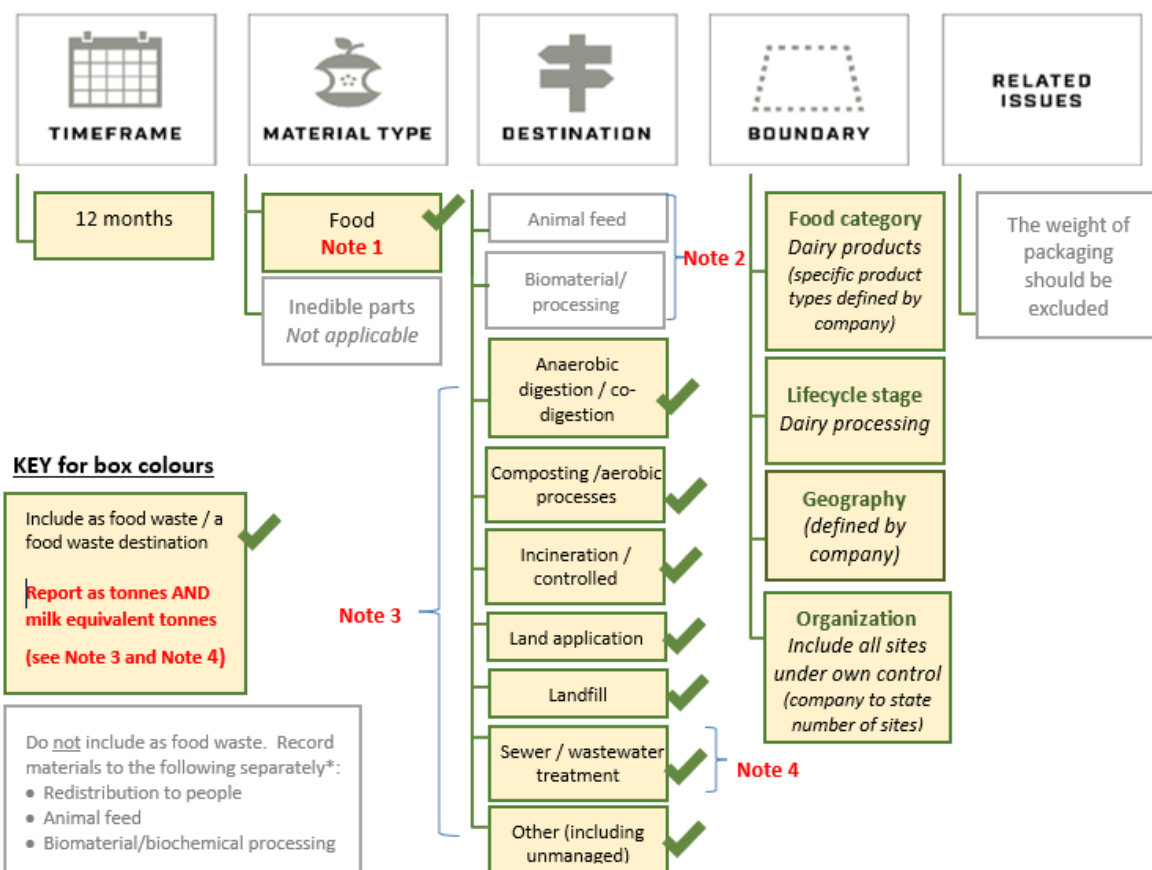
The UK Guidelines are available [here](#).

This document should be used in conjunction with the wider UK Guidelines. It provides additional recommendations for dairy processing businesses, based on the specific operational considerations and challenges relevant to this sector. A key challenge for dairy processors is the need to account in a consistent way for very dilute or very concentrated waste streams.

These recommendations will be reviewed annually to ensure that they remain fit-for-purpose. For example, as understanding of dairy processing wastes and measurement approaches improve.

Figure 1 outlines the recommended scope for measuring and reporting food surplus and waste from dairy processing operations. This structure forms a core part of the common Reporting Template for UK food businesses.

Figure 1 – Recommended scope of food surplus and waste inventory for Dairy processing operations



Recommendations for external reporting and internal KPIs for tracking efficiency are outlined in **Note 4** and **Note 5** overleaf. For a list of destination definitions, please see the UK Guidelines.

Notes:

- 1 **All material should be categorised as 'food'** (meaning that at some point it was potentially intended for human consumption) since all parts of dairy products could be consumed by people. This includes what may be called by-products (such as whey). Businesses may also choose for internal purposes to track by-products separately as a distinct "food category" to understand how these material streams are handled.
- 2 **Do not include material to these destinations as food waste.** Instead, **separately record & report** the amount of material to the following (ideally as both tonnes and milk-equivalent tonnes – see below):
 - Redistribution to people
 - Animal feed
 - Biomaterial/biochemical processing
- 3 **For all material to these destinations:**
 - I. Record & report total quantity (tonnes); and
 - II. Record & report an estimate of tonnes milk equivalent by:
 - Firstly, estimating solids content; and
 - Secondly converting this into 'milk equivalents' – using conversion factor: milk = 12% solids.
 - NB – the same approach can be taken for non-dairy food stuffs used by dairy processors (e.g. oils, fruit and other ingredients) – using solids content and an appropriate conversion factor.

Any calculations and assumptions must be clearly recorded and transparent when reporting.

4 For material in effluent streams, to sewer or wastewater treatment:

Record & report an estimate of tonnes milk equivalent by:

- Recording effluent COD load (pre-treatment) in tonnes; and
- Converting into 'milk equivalents' – using conversion factor: 1kg COD = 0.223kg milk
- NB – the same approach can be taken for non-dairy food stuffs used by dairy processors (e.g. oils, fruit) – using COD load and an appropriate conversion factor.

Any calculations and assumptions must be clearly recorded and transparent when reporting.

5 If sharing data externally for any purposes (e.g. public or anonymous reporting), businesses should use the common [Reporting Template](#).

The Reporting Template is intended for common use by UK food businesses, in order to generate a consistent and transparent Food Waste Report. The Reporting Template requests that businesses provide the following summary points. Specific points of clarification for dairy processing are as follows.

- Overall food waste in tonnes:
 - for dairy processing this should be tonnes AND milk-equivalent tonnes
- Food waste as a % of the product and ingredient handled:
 - for dairy processing this should be the quantity of food waste in milk equivalent tonnes divided by tonnes milk equivalent intake.

Any calculations and assumptions must be clearly recorded and transparent when reporting.