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(ICS 67.020; 13.020.20; 13.030.99)

SINGAPORE STANDARD

**Code of practice for food waste management
for food processing/manufacturing
establishments**

Confirmed and classified as mature standard 2025

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Foreword

This Singapore Standard was prepared by the Working Group on Food Waste Management for Food Processing/Manufacturing Establishments under the direction of the Food Standards Committee.

This standard is developed to help reduce food waste. The more food waste is being produced, the more there is to dispose of by recycling and re-using, burial (landfill) or burning (incineration). For land scarce Singapore, this poses a challenge to find land for landfills and incineration plants. Therefore, there is a need to manage food waste holistically.

This standard is intended to improve food manufacturing practices and competitiveness through a more efficient use of food resources in production/planning processes. This includes food waste reduction management that takes into consideration overproduction, expiration, spoilage, overcooked items, contaminated items, etc.

With food waste reduction management in place, it increases Singapore's resistance to price fluctuations in imported raw agricultural materials and reinforces the concept of sustainable production. Reduction in waste also helps food processing/manufacturing establishments to save money on commodities, labour, energy and disposal costs.

In preparing this standard, reference was made to the following publications:

1. Food Loss and Waste Accounting and Reporting Standard Version 1.0, Food Loss + Waste Protocol, <http://www.wbcsd.org/contentwbc/download/1003/12937>
2. Global food losses and food waste – Extent, causes and prevention (2011), Rome, Food and Agriculture Organization of the United Nations (FAO), <http://www.fao.org/docrep/014/mb060e/mb060e.pdf>
3. SAVE FOOD: Global Initiative on Food Loss and Waste Reduction, Definitional framework of food loss(27 February 2014), Rome, Food and Agriculture Organization of the United Nations (FAO), <http://www.fao.org/3/a-at144e.pdf>
4. Sustainable Management of Food: Food Recovery Hierarchy, United States Environmental Protection Agency, <https://www.epa.gov/sustainable-management-food/food-recovery-hierarchy>
5. Technical Paper on Post-Harvest Losses and Strategies to Reduce Them (January 2014), Action Contre la Faim (ACF), ACF International, https://www.actioncontrelafaim.org/wp-content/uploads/2018/01/technical_paper_phl_.pdf

Acknowledgement is made for the use of information from the above publications.

This standard is expected to be used by food processing/manufacturing establishments, which include slaughter houses, food processing, central kitchen, storage providers and business-to-business (B2B) service providers.

Attention is drawn to the possibility that some of the elements of this Singapore Standard may be the subject of patent rights. Enterprise Singapore shall not be held responsible for identifying any or all of such patent rights.

NOTE

1. *Singapore Standards (SSs) and Technical References (TRs) are reviewed periodically to keep abreast of technical changes, technological developments and industry practices. The changes are documented through the issue of either amendments or revisions. Where SSs are deemed to be stable, i.e. no foreseeable changes in them, they will be classified as “mature standards”. Mature standards will not be subject to further review unless there are requests to review such standards.*
2. *An SS or TR is voluntary in nature except when it is made mandatory by a regulatory authority. It can also be cited in contracts making its application a business necessity. Users are advised to assess and determine whether the SS or TR is suitable for their intended use or purpose. If required, they should refer to the relevant professionals or experts for advice on the use of the document. Enterprise Singapore and the Singapore Standards Council shall not be liable for any damages whether directly or indirectly suffered by anyone or any organisation as a result of the use of any SS or TR. Although care has been taken to draft this standard, users are also advised to ensure that they apply the information after due diligence.*
3. *Compliance with a SS or TR does not exempt users from any legal obligations.*

Code of practice for food waste management for food processing/manufacturing establishments

1 Scope and objective

1.1 Scope

This Singapore Standard specifies the recommended best practices for food processing/manufacturing establishments in developing their food waste management plans. It sets out recommendations and guidelines for proper food waste management at various stages in the food value chain, from receiving raw materials, to processing, storage, packaging, transportation, distribution, and returned foods. It does not include incoming raw material and recalled products (see Figure 1).

The deletion of stages or processes is only permitted if it does not significantly change the overall conclusions of the study. Any decision to omit stages or processes should be clearly stated, and the reasons and implications for their omission should be explained.

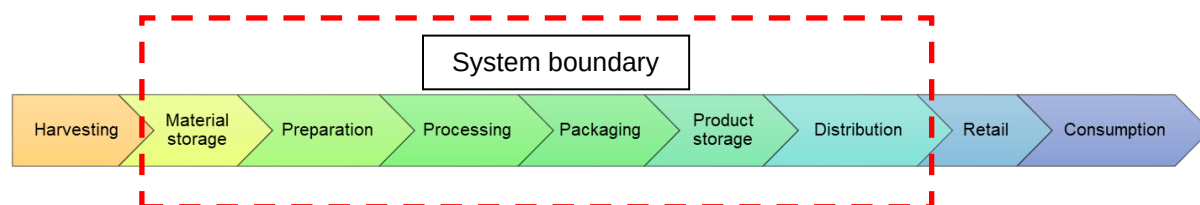


Figure 1 – Food value chain

1.2 Objective

The objective of this Singapore Standard is to help food processing/manufacturing establishments develop a food waste management plan with the goal of minimising food waste generated and a move towards a zero-waste nation, as set out in the Sustainable Singapore Blueprint 2015.

2 Normative references

There are no normative references in this standard.