



### **TECHNICAL REFERENCE**

# Food storage warehouses – Food products stored under ambient conditions





**TR 35 : 2013** (ICS 91.010.30; 91.080.01)

TECHNICAL REFERENCE

# Food storage warehouses – Food products stored under ambient conditions

All rights reserved. Unless otherwise specified, no part of this Singapore Standard may be reproduced or utilised in any form or by any means, electronic or mechanical, including photocopying and microfilming, without permission in writing from SPRING Singapore at the address below:

Standards SPRING Singapore 1 Fusionopolis Walk, #01-02 South Tower, Solaris Singapore 138628 Email : standards@spring.gov.sg

ISBN 978-981-4353-94-6

TR 35 : 2013

First published, 2013

#### NOTE

- 1. Users of this Technical Reference should refer to the relevant professional or experts for any technical advice on the subject matter. SPRING Singapore shall not be liable for any damages whether directly or indirectly suffered by anyone as a result of reliance on this Technical Reference.
- 2. Compliance with this Technical Reference does not exempt users from legal obligations.

Page

#### Contents

### Foreword \_\_\_\_\_ 7

#### CLAUSES

| 1 | Scope and objective   |    |
|---|---|----|
| 2 | Normative references  | 8  |
| 3 | Definitions   | 8  |
| 4 | Warehouse exterior and surroundings – Buildings and grounds | 10 |
| 5 | Warehouse structure, design, equipment and maintenance      | 10 |
| 6 | Transportation requirements                                 | 14 |
| 7 | Food safety management                                      | 14 |
| 8 | Principles of traceability system and product recall        | 19 |

#### ANNEXES

| A | Guide for developing procedures for receiving, transportation and delivery | 20 |
|---|--|----|
| В | Receiving log (Sample)   | 22 |
| С | Outgoing products log (Sample)   | 23 |
| D | Guide for developing food storage procedures worksheet                     | 24 |
| Е | Guide for developing food storage warehouse recall plan                    | 25 |

#### Foreword

This Technical Reference was prepared by the Technical Committee on Food Storage Warehouses for Food Products under the direction of the Food Standards Committee (FSC). The FSC endorsed the Technical Reference on 11 June 2013.

This Technical Reference was prepared for receiving, handling, storage, and distribution of food and food products in retail packages and/or shipping containers at food distribution centres and food storage warehouses, referred to as "food storage warehouses" throughout this Technical Reference. The term "food(s)" in this Technical Reference means foods and food products which are contained in retail packages and/or shipping containers.

If food storage warehouses and food manufacturing, processing, or packaging operations are maintained in the same establishment, neither type of operation should interfere with the compliance with any good sanitation practices, guidelines, or regulations applicable to the other types of operations.

This Technical Reference is not to be regarded as a Singapore Standard. This Technical Reference is made available for provisional application over a period of two years, but does not have the status of a Singapore Standard. The aim is to use the experience gained to modify the Technical Reference so that it can be adopted as a Singapore Standard. Users of the Technical Reference are invited to comment on its technical content, ease of use and any ambiguities or anomalies. These comments can be submitted using the feedback form provided at the end of the Technical Reference and will be taken into account in the review of the publication. At the end of the two years, the Technical Reference will be reviewed by the TC/WG to discuss the comments received and to determine its suitability as a Singapore Standard. Submission for approval by the Standards Council as a Singapore Standard will be carried out only upon agreement after review.

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

- 1. Agri-Food & Veterinary Authority of Singapore, September 2010, Conditions of licensing for food establishments
- 2. British Retail Consortium (BRC), TSO (The Stationery Office), September 2010, BRC Global standard for storage and distribution, Issue 2
- 3. Code of Federal Regulations, Title 21 Food And Drugs, Chapter 1, Subchapter B Food for human consumption, Part 110 Current good manufacturing practice in manufacturing, packing, or holding human food effective from June 10, 1986
- 4. Oregon Secretary of State, Archives division, department of agriculture, January 2013, Division 25 -Food establishment standards and standards for retail food service activities
- 5. Food and Agriculture Organisation of the United Nations (FAO) and World Health Organisation (WHO), December 2012, FAO/WHO guide for developing and improving national food recall systems
- 6. John Ryu and Diane Taillard, GS1 AISBL, November 2012, GS1 Standards Document GS1 Global traceability standard Issue 1.3.0
- 7. Gary W. Bennett, John M. Owens, Robert M. Corrigan, 2010, Truman's scientific guide to pest control operations 7th edition, Questex Media Group LLC & Purdue University Press

8. Department of Environmental Health, Food & Housing Division, County of San Diego, CA, US, October 2003, Wholesale food warehouse risk control plan workbook

Acknowledgement is made to the following organisations for the reproduction of their materials in this Technical Reference:

County of San Diego, Department of Environmental Health, Food & Housing Division, for the for reproduction of their materials in Clauses 6, 7.1, 7.2, 7.3, 8 and all the annexes.

Oregon Secretary of State, Archives division, department of agriculture for reproduction of their materials in Clauses 3, 4, 5, 6, 7.2 and 7.3.

GS1 AISBL for reproduction of their materials in Annex E.

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

## Technical Reference for food storage warehouses – Food products stored under ambient conditions

#### 1 Scope and objective

#### 1.1 Scope

This Technical Reference is to be used as a reference material for warehouse operators, owners of the products and associated stakeholders to promote best practices and to improve industry practices with regard to food storage for the purpose of distribution.

The content contains obligatory and recommended standards pertaining to the following areas of food storage warehouses that would affect food safety and traceability:

- a) Warehouse exterior and surroundings;
- b) Warehouse structure, design, equipment and maintenance;
- c) Transportation requirements;
- d) Food safety management;
- e) Traceability system and product recall.

The Technical Reference applies to storage of food products under ambient conditions only; it does not apply to facilities for the storage of food under chilled or frozen conditions. If food processing activities are to be carried out in the warehouse, relevant requirements for processing of the food products shall also apply.

It is not designed to cover food manufacturing, processing, or packaging areas and related equipment, practices, and procedures which are subject to regulations and/or guidelines specifically developed for those types of operations.

#### 1.2 Objective

The objective of this Technical Reference is to provide guidelines for food storage warehouses that are used to store food products under ambient conditions to ensure food safety and traceability.

This Technical Reference can be used by management and operators of food storage warehouses in developing and maintaining facilities, methods, practices, and controls for the receiving, handling, storage, and shipping of foods in a manner that protects the public health.

All warehouse operators are encouraged to apply the Technical Reference in their work procedures, education and training materials, where appropriate, irrespective of whether the operator is the legal owner of the product or the product is owned by third party owner(s).

#### 2 Normative references

There are no normative references in this Technical Reference.