AS/NZS 2843.1:2006
(Incorporating Amendment Nos 1 and 2)
Reconfirmed 2016

Australian/New Zealand Standard[TM]

Timber preservation plants

Part 1: Timber preservation plant site design

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee TM-006, Timber Preservation and Durability. It was approved on behalf of the Council of Standards Australia on 11 May 2006 and on behalf of the Council of Standards New Zealand on 19 May 2006.
This Standard was published on 7 July 2006.

The following are represented on Committee TM-006:

A3P
Australian Pesticides and Veterinary Medicines Authority
Consumers Federation of Australia
Department of Primary Industries and Fisheries
Engineered Wood Products Association of Australasia
Engineers Australia
Ensis
Forests NSW
Glued Laminated Timber Association of Australia
Housing Industry Association, Australia
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New Zealand Timber Industry Federation
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Timber Preservers Association of Australia
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Additional Interests:

Dr Harry Greaves

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This Standard was issued in draft form for comment as DR 05581.

STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

RECONFIRMATION

OF
AS/NZS 2843.1:2006
Timber preservation plants
Part 1: Timber preservation plant site design

RECONFIRMATION NOTICE

Technical Committee TM-012 has reviewed the content of this publication and, in accordance with Standards Australia procedures for reconfirmation, it has been determined that the publication is still valid and does not require change.

Certain documents referenced in the publication may have been amended since the original date of publication. Users are advised to ensure that they are using the latest versions of such documents as appropriate, unless advised otherwise in this Reconfirmation Notice.

Approved for reconfirmation in accordance with Standards Australia procedures for reconfirmation on 20 May 2016.

Approved for reconfirmation in New Zealand on behalf of the Standards Council of New Zealand on 5 July 2016.

The following are represented on Technical Committee TM-012:

Australian and New Zealand Timber Preservative Manufacturers Association
Australian Forest Products Association
Australian Pesticides and Veterinary Medicines Authority
Australian Timber Flooring Association
Australian Timber Importers Federation
Building Research Association of New Zealand
Department of Agriculture, Fisheries and Forestry (QLD)
Engineered Wood Products Association of Australasia
Forest and Wood Products Australia
Forestry Corporation of NSW
Glued Laminated Timber Association of Australia
Master Builders Australia
NATSPEC
New Zealand Timber Industry Federation
New Zealand Timber Preservation Council
New Zealand Wood Processors Association
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Scion
Tasmanian Timber Promotion Board
Timber Preservers Association of Australia

NOTES

AS/NZS 2843.1:2006
(Incorporating Amendment Nos 1 and 2)

Australian/New Zealand Standard[TM]

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Originally AS 2843.1—1985.
Jointly revised and designated AS/NZS 2843.1:2000.
Second edition 2006.
Reissued incorporating Amendment No. 1 (December 2006).
Reissued incorporating Amendment No. 2 (February 2008).

Jointly published by Standards Australia, GPO Box 476, Sydney, NSW 2001 and Standards New Zealand, Private Bag 2439, Wellington 6020

ISBN 0 7337 7604 3

PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee TM/6, Timber Preservation, to supersede AS/NZS 2843.1:2000, *Timber preservation plant safety code*, Part 1: *Plant design*.

This Standard incorporates Amendments No. 1 (December 2006) and No. 2 (February 2008). The changes required by the Amendment are indicated in the text by a marginal bar and amendment number against the clause, note, table, figure, or part thereof affected.

The objective of this Standard is to promote the safe operation of timber preservation plant sites and to reduce environmental and occupational hazards.

The objective of this revision is to ensure Australian and New Zealand timber preservation plant sites operate to the world's best practice.

This Standard incorporates information on, and the contents of, *The Australian environmental guidelines for copper chrome arsenate timber preservation plants*, as prepared by the Australian and New Zealand Environment and Conservation Council (ANZECC) and The Timber Preservers Association of Australia (TPAA). It also incorporates broad guidelines on the design of non-CCA treatment plants. Specific detailed requirements in these areas may be sourced from other appropriate authorities.

This Standard is Part 1 of the AS/NZS 2843 series on safety in timber preservation and is concerned with the siting and layout of new timber preservation plant sites and offers improved practice options for the existing timber preservation plant sites. Such existing timber preservation plant sites should initially seek to meet the requirements specified in this Standard or the *Best Practice Guidelines for the Safe Use of Timber Preservatives and Antisaptain Chemicals* in New Zealand.

The adoption of the requirements of this Standard will assist in preventing and mitigating the health risk of plant personnel and environmental contamination from timber preservation plant sites.

The development of new technology is encouraged. If it can be demonstrated to the satisfaction of the relevant authority that new technology, which may include cleaner and safer production strategies, obviates the need for some of the requirements of this Standard, the requirements of this Standard may be considered accordingly in respect of timber preservation plant sites exclusively using such technology.

The terms 'normative' and 'informative' have been used in this Standard to define the application of the appendix to which they apply. A 'normative' appendix is an integral part of a Standard, whereas an 'informative' appendix is only for information and guidance.

CONTENTS

Page

SECTION 1 SCOPE AND GENERAL
1.1 SCOPE 5
1.2 APPLICATION 5
1.3 REFERENCED DOCUMENTS 5
1.4 DEFINITIONS 6
1.5 TRANSPORT AND STORAGE 7
1.6 IDENTIFICATION OF TIMBER-PRESERVATIVE CONTAINERS 7
1.7 APPROVAL BY REGULATORY AUTHORITIES 7

SECTION 2 TREATMENT AREA
2.1 GENERAL 8
2.2 SLOPE OF TREATMENT AREA 8
2.3 SOIL TYPE 8
2.4 WATER BODIES 8
2.5 FLOODING 8

SECTION 3 TIMBER PRESERVATION PLANT SITE LAYOUT
3.1 GENERAL 9
3.2 STORMWATER MANAGEMENT 9
3.3 HOLDING CAPACITY 10
3.4 CONTAINMENT OF SPILLAGE 11
3.5 CONTAINMENT OF DRY PRESERVATIVE AND CONTAMINATED DUST 11
3.6 TREATMENT AREA—CONSTRUCTION 11
3.7 TREATED-TIMBER STORAGE AREA 12
3.8 ACCESS BY UNAUTHORIZED PERSONS 12
3.9 CHANGE ROOM AND TOILET FACILITIES 12
3.10 EMERGENCY SHOWERS, WASHING AND EYE-WASHING FACILITIES 13
3.11 EATING FACILITIES 13
3.12 AREAS WHERE FLAMMABLE MATERIALS ARE USED 13
3.13 AIR QUALITY 13

SECTION 4 EQUIPMENT DESIGN
4.1 GENERAL 14
4.2 PRESSURE VESSELS 14
4.3 HAZARDS TO OPERATORS 14
4.4 VACUUM PUMPS 14
4.5 NOISE 14
4.6 FIREFIGHTING EQUIPMENT 14
4.7 TANKS AND FITTINGS 14
4.8 SUMPS 15
4.9 NON-PRESSURE TREATMENT EQUIPMENT 15

APPENDICES
A LISTS OF REGULATORY AUTHORITIES 16
B REFERENCED DOCUMENTS 23
C TESTING FOR FIXATION USING MERCK KIT 24

FOREWORD

This Standard is directed towards assisting prevention or mitigation of the health risk of plant personnel and environmental contamination from timber preservation plant sites. This is done by drawing attention to siting, design, and layout procedures.

A timber preservation plant site should be designed and constructed so as to reduce the risk to those working therein, the public, livestock and crops in the vicinity of the timber preservation plant site, and the environment including, generally, the quality of surface and sub-surface water.

The aim of this Standard is to—

(a) preserve the dispersion of hazardous chemicals to places other than where they are intended to be applied, namely, within the structure of preservative-treated timber; and

(b) preserve the health of personnel engaged in the timber preservation operation by minimizing their physical contact with timber preservatives.

Minimum requirements are prescribed for the siting, design, and layout of timber preservation plant sites, and those responsible for the timber preservation plant site design should have an understanding of the consequences of unsound practice. The requirements for the associated timber preservation plant site practices and procedures are covered in AS/NZS 2843.2, *Timber preservation plant*, Part 2: *Treatment and operation*.

All those responsible for the design and installation of such timber preservation plant sites should be aware of the requirements for safe and effective handling, storage and transport of pesticides. In this connection, attention is drawn to the AS 1678 series, *Emergency procedure guide—Transport*, and AS 2508 series, *Safe storage and handling information card*.

There are some prescribed procedures for the safe disposal of waste industrial chemicals, the safe disposal of waste material from the timber preservation plant site, and the safe disposal of concentrate containers. These procedures have been established by various government agencies such as Departments of Agriculture and Environment Protection authorities. Designers should be conversant with such procedures and with the *National Code for Transport of Dangerous Goods* in Australia, NZS 5433, *Code of practice for the transport of hazardous substances on land*, or the *Hazardous Substances (Tank Wagons and Transportable Containers) Regulations 2004* in New Zealand, and should apply them when formulating arrangements for the management of waste materials.

STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

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SECTION 1 SCOPE AND GENERAL

1.1 SCOPE

This Standard specifies requirements for the siting, design and layout of timber preservation plant sites. It deals with these aspects in a manner intended to prevent and mitigate the health risk of plant personnel and minimize environmental contamination from timber preservation plant sites. It is applicable to all approved preservatives and, where necessary, specific requirements for some preservative are given, e.g., CCA.

NOTE: Attention should be drawn to the principles of risk management set out in AS/NZS 4360 and the AS/NZS ISO 14000 series.

1.2 APPLICATION

Treatment of timber in a timber preservation plant site is by general progression through several separate areas of the site until the finished product is dispatched.

The first area is a storage area for untreated timber where the timber is made ready for treatment where there is little or no risk to the environment.

The second area is for storage of the preservative chemicals and the equipment used for the treatment process.

Immediately after treatment, the freshly treated timber is moved to the third area—the drip pad (see Clause 1.4.4). For some treatment processes with some chemicals, excess treatment solution may drip from the freshly treated timber onto the drip pad.

The second and third areas make up the treatment area (see Clause 1.4.6), where the greatest risk to the environment and to the workers is posed, and so the greatest controls and safeguards are required.

When the freshly treated timber is drip-free (see Clause 1.4.3), it can be moved to a fourth area, referred to as the treated-timber storage area (see Clause 1.4.7), where there is much less risk to the environment and the workers (in relation to chemicals) posed, but where some controls and monitoring are required.

This Standard is intended for use by timber preservation plant and equipment designers, owners, managers and operators. It is also intended to be of assistance to regulatory authorities responsible for approving and licensing timber preservation plants.

NOTES:

1 Figure 1 shows a schematic plan of a timber preservation plant site.

2 Appendix A lists the regulatory authorities involved in some aspects of timber preservation.

1.3 REFERENCED DOCUMENTS

The documents referred to in this Standard are listed in Appendix B.