Australian/New Zealand Standard™

Timber preservation plant safety code

Part 1: Plant design

Standards Australia

STANDARDS NEW ZEALAND

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee TM/6, Timber Preservation. It was approved on behalf of the Council of Standards Australia on 11 February 2000 and on behalf of the Council of Standards New Zealand on 5 January 2000. It was published on 7 April 2000.

The following interests are represented on Committee TM/6:

CSIRO, Division of Forestry and Forest Products
Housing Industry Association, Australia
Institution of Engineers, Australia
National Registration Authority for Agricultural and Veterinary Chemicals
New Zealand Forest Research Institute
New Zealand Timber Industry Federation
New Zealand Timber Preservation Council
Plywood Association of Australia
Queensland Forest Research Institute
State Forests of New South Wales
Timber Preservers Association of Australia
Timber Promotion Council
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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee TM/6, Timber Preservation, to supersede AS 2843.1—1985.

The objective of this Standard is to promote the safe operation of treatment plants and to reduce environmental and occupational hazards.

This Standard incorporates information on, and the contents of, *The Australian environmental guidelines for copper chrome arsenate timber preservation plants*, which was 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 plants and offers improved practice options for the existing plants. Such existing plants should initially seek to meet the requirements specified in this Standard or the *Approved Code of Practice for the use of Timber Preservatives and Antisapstain Chemicals* in New Zealand.

The adoption of the requirements of this Standard will improve occupational safety in treatment plants and help lower environmental pollution.

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 plants 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.

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FOREWORD

This Standard is directed towards improving the occupational health and safety of plant personnel and minimizing environmental contamination from timber preservation plants. This is done by drawing attention to siting, design and layout procedures.

A timber preservation plant 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 plant, and the environment including, generally, the quality of surface and sub-surface water.

This Standard is directed towards—

(a) preserving 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) preserving 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 plants, and those responsible for plant design should have an understanding of the consequences of unsound practice. The requirements for the associated treatment plant practice and procedures are covered in AS/NZS 2843.2.

All those responsible for the design and installation of such plants 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 and AS 2508 series.

There are some prescribed procedures for the safe disposal of waste industrial chemicals, the safe disposal of waste material from the plant, 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*, and should apply them when formulating arrangements for the management of waste materials.

STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

Australian/New Zealand Standard
Timber preservation plant safety code

Part 1: Plant design

SECTION 1 SCOPE AND GENERAL

1.1 SCOPE

This Standard specifies requirements for the siting, design and layout of timber preservation plants (hereinafter referred to as plant(s)). It deals in general terms with these aspects in a manner intended to reduce the occupational health risk to plant operators and to lower the potential for environmental pollution.

1.2 APPLICATION

This Standard is intended to be used by 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.

NOTE: 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.

1.4 DEFINITIONS

For the purpose of this Standard, the definitions below apply.

1.4.1 Drip free

Drip free means that the timber has stopped dripping on the drip pad and that no further drippage occurs when timber is moved, tilted or exposed to heat or sunlight.

1.4.2 External water

Any water from outside the treatment plant yard.

1.4.3 Plant water

Any water that falls on the unroofed area of the treatment plant site.

1.4.4 Timber treatment plant

The area included by the treatment plant site (see Clause 1.4.5) and treatment plant yard (see Clause 1.4.6).

1.4.5 Treatment plant site

The area in which treatment is carried out (including vessels, pumps, storage and mixing tanks, chemical handling area, loading, unloading and work area) AND the drip pad where freshly treated timber is stored.