AS/NZS 2299.1:1999

# Australian/New Zealand Standard™

## **Occupational diving operations**

Part 1: Standard operational practice

#### AS/NZS 2299.1:1999

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee SF/17, Occupational Diving. It was approved on behalf of the Council of Standards Australia on 16 November 1998 and on behalf of the Council of Standards New Zealand on 9 November 1998. It was published on 5 March 1999.

The following interests are represented on Committee SF/17:

Australian Chamber of Commerce and Industry Australian Council of Trade Unions Australian Dive Council Australian Diving Contractors Association Australian Industry Group Australian Marine Sciences Association Australian Medical Association Department for Administrative and Information Services, South Australia Department of Defence, Australia Department of Labour, New Zealand Department of Primary Industries and Energy (Commonwealth) Department of Training and Industrial Relations, Qld Dive Queensland Diving Industry Training Organization, New Zealand Hyperbaric Engineering Industry Forum Maritime Union of Australia National Association of Occupational Diver Training Establishments, Australia New Zealand Commercial Diver Training Council New Zealand Underwater Association N.S.W. Police Service Royal New Zealand Navy South Pacific Underwater Medicine Society Underwater Visual Producers Association Australia WorkCover New South Wales WorkSafe Western Australia

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Suggestions for improvements to Joint Standards, addressed to the head office of either Standards Australia or Standards New Zealand, are welcomed. Notification of any inaccuracy or ambiguity found in a Joint Australian/New Zealand Standard should be made without delay in order that the matter may be investigated and appropriate action taken.

This Standard was issued in draft form for comment as DR 97321.

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#### PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee SF/17, Occupational Diving, to supersede AS 2299—1992, *Occupational diving*.

This Standard is intended to be the initial Part of a series of Standards for the conduct of occupational diving operations. It is intended for application to all diving operations until such time as Standards for the conduct of diving operations in specific sectors of the diving industry are published. At that time, diving operations which fall into the scope of a sector-specific Standard may be conducted using either this Standard or the sector-specific Standard. At the time of publication, sector-specific Standards for scientific, recreational and film and photographic diving operations were in the course of preparation.

The objective of this revision is to clarify and update the Standard and to reflect the requirements of the regulatory authorities. Significant differences from the 1992 edition include the following:

- (a) Addition of hazard identification, risk assessment and risk control measures in accordance with current occupational health and safety legislation.
- (b) Advice on the application of the Standard for breathing gases other than air, diving in liquids other than water and hookah or rebreather gas supply systems.
- (c) An expanded table dealing with exposure to altitude after diving.
- (d) Revision of the time listed for Level 1 limits for compression chamber availability to make them more consistent in terms of risk level, based on the latest DCI risk data available from the US Naval Medical Research Institute.
- (e) Reformatting of Section 4 (Compression (Recompression) Chambers) and the dropping of the requirement for worksite chambers to have transfer-under-pressure capability.
- (f) New clauses dealing with decompression diving, and an expanded appendix containing the decompression tables developed by the Canadian Defence and Civil Institute of Experimental Medicine (DCIEM) in both metric and imperial forms, with associated procedures and examples.
- (g) A new Section 8 dealing with medical requirements, and reformatted diving medical forms in Appendix L.
- (h) A new appendix containing a list of regulatory authorities in Australia and New Zealand.
- (i) Modifications to various clauses were made to address points raised in investigations of several fatal and non-fatal carbon monoxide exposures.

The procedures, tables, figures and worksheets from the DCIEM Diving Manual which have been used in Appendix F are reproduced with the permission of the Defence and Civil Institute of Environmental Medicine (DCIEM). The copyright for this material remains with Her Majesty the Queen in Right of Canada. The Department of National Defence (Canada), the Defence and Civil Institute of Environmental Medicine (DCIEM) and Standards Australia disclaim any and all responsibilities for the use of these tables and procedures.

The illustrations for the hand signals shown in Appendix J are reproduced with the permission of PADI Australia Pty Ltd.

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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