



Australian Government

Comcare

Defence High Risk Diving Work Standard

Approved by Comcare under
the *Work Health and Safety
Regulations 2011*

Disclaimer

This Defence High Risk Diving Work Standard (this Defence Standard) is approved by Comcare for the carrying out of high risk diving work by members of the Australian Defence Force, in terms of regulations 183 and 184 of the *Work Health and Safety Regulations 2011* and is not to be taken as an expression of the law for other purposes. This Defence Standard must be read in conjunction with the relevant legislation and the Australian Standards to which this Defence Standard refers. For more information contact Comcare.

Publication details

Published by Comcare

© Commonwealth of Australia 2024

With the exception of the Commonwealth Coat of Arms, all material presented in this publication is provided under a Creative Commons Attribution 4.0 International (<https://creativecommons.org/licenses/by/4.0/deed.en>) licence.

For the avoidance of doubt, this means this licence only applies to material as set out in this document.



The details of the relevant licence conditions are available on the Creative Commons website (accessible using the links provided) as is the full legal code for the CC BY 4.0 International licence (<https://creativecommons.org/licenses/by/4.0/legalcode.en>).

Use of the Coat of Arms

The terms under which the Coat of Arms can be used are detailed on the Department of the Prime Minister and Cabinet website (<https://www.pmc.gov.au/honours-and-symbols/commonwealth-coat-arms>).

Contact us

Inquiries regarding the licence and any use of this document are welcome at:

Director Regulatory Policy
Regulatory Operations Group
Comcare
GPO Box 9905
Canberra ACT 2601

Ph: 1300 366 979

Email: regulatorypolicy@comcare.gov.au

www.comcare.gov.au

Contents

Section 1 - Scope and general	3
1.1 Scope.....	3
1.2 Objective	3
1.3 Application	3
1.4 Normative references	4
1.5 Definitions	4
1.6 Relationship with legislation	5
Adoption of Clause 1.7.....	6
Section 2 - Personnel, training and records	6
2.1 Dive supervisor.....	6
2.2 Diver	7
Adoption of Clauses 2.3 to 2.6.....	8
Section 3 - General procedures and equipment.....	9
3.1 Organisation and planning	9
Adoption of Clauses 3.2 to 3.11.....	9
Section 4 - Breathing gas quality	10
4.1 General.....	10
4.2 Water content.....	10
4.3 Adoption of Clause 4.3.....	10
4.4 Breathing gas composition	10
Adoption of Clauses 4.5 to 4.6.....	10
Section 5 - Compression (recompression) chambers.....	11
5.1 Compression chamber support of diving.....	11
Adoption of Clauses 5.2 to 5.6.....	11
Section 6 – Specific requirements for SSBA diving operations.....	11
Adoption of Clauses 6.1 to 6.8.....	11
Section 7 – Specific requirements for SCUBA diving operations	11
7.1 General.....	11
7.2 Restricted use of SCUBA	12
7.3 Personnel required	12
Adoption of Clauses 7.4 to 7.5.....	12
Section 8 – Specific requirements for EAN diving operations	12
Adoption of Clauses 8.1 to 8.8.....	12
Section 9 – Accident reporting	13
Adoption of Clauses 9.1 and 9.2	13
Section 10 – Medical requirements.....	13
Adoption of Clauses 10.1 and 10.2	13
Appendices	13

Section 1 - Scope and general

1.1 Scope

This Defence High Risk Diving Work Standard (**this Defence Standard**) provides a Standard for the carrying out of high risk diving work by members of the Australian Defence Force (**the Defence Force**), and for the required fitness any competence of those members. This Defence Standard is approved by Comcare in terms of regulation 183(2) of the *Work Health and Safety Regulations 2011* (**WHS Regulations**).

This Defence Standard comes into effect on 31 March 2025 and replaces the Defence High Risk Diving Work Standard which came into effect on 15 May 2014.

1.2 Objective

Regulation 183(2) of the WHS Regulations permits Comcare to approve a Standard for the carrying out of high risk diving work by a member of the Defence Force as an alternative to the Standard referred to in regulation 183(1).

The objective of this Defence Standard is to provide an approved Standard for:

- a) the fitness of Defence Force members carrying out high risk diving work;
- b) the competence of Defence Force members carrying out high risk diving work;
- c) the carrying out of Defence high risk diving work.

(summarised as '**the fitness and competence of Defence diving members and the carrying out of Defence high risk diving work**'))

1.3 Application

1.3.1 Adoption of Standards

This Defence Standard adopts the following Standards for the fitness and competence of Defence diving members and the carrying out of Defence high risk diving work, except as modified by this Defence Standard:

- AS/NZS 2299.1:2015 (Occupational diving operations. Part 1: Standard operational practice)
- AS 2815.1 (Training and certification of occupational divers. Part 1: Occupational SCUBA diver)
- AS 2815.2 (Training and certification of occupational divers. Part 2: Surface supplied diver to 30 m)
- AS 2815.3 (Training and certification of occupational divers. Part 3: Surface supplied diving to 50)
- AS 2815.4 (Training and certification of occupational divers. Part 4: Closed bell diving)
- AS/NZS 2815.5 (Training and certification of occupational divers. Part 5: Dive supervisor)
- AS/NZS 2815.6 (Training and certification of occupational divers. Part 6: Restricted occupational SCUBA diver)

Collectively, AS 2815.1 to AS/NZS 2815.6 are referred to in this Defence Standard as the **AS(/NZS) 2815 training and certification series**.

This Defence Standard also adopts all other Standards referenced in clause 1.4 (Normative references) of AS/NZS 2299.1:2015, to the extent that the Standards can be applied to the fitness and competence of Defence diving members and the carrying out of Defence high risk diving work. This Defence Standard does not modify those other Standards.

This Defence Standard must be read in conjunction with the adopted Standards.

1.3.2 The application of AS/NZS 2299.1:2015 in this Defence Standard

AS/NZS 2299.1:2015 provides organisational and logistical standards for the conduct of occupational diving operations, including the use of compressed gas supply apparatus, and specific requirements for the use of surface supplied breathing apparatus (**SSBA**) and open-circuit self-contained underwater breathing apparatus (**SCUBA**) in occupational underwater operations at depths not exceeding 50 meters. This includes standards for diving activities using air or enriched air nitrox (**EAN**) breathing mixtures.

This Defence Standard adopts AS/NZS 2299.1:2015 for the fitness and competence of Defence diving members and the carrying out of Defence high risk diving work, except as modified by this Defence Standard, regardless of the depths of the work or the breathing apparatus or breathing mixture being used. For example, much of Section 3 (General procedures and equipment) and Section 5 (Compressions (Recompression) Chambers) of AS/NZS 2299.1:2015 can be applied to diving operations at depths greater than 50 meters, to breathing apparatus other than SCUBA and SSBA, and to breathing mixtures other than air or EAN.

1.4 Normative references

This Defence Standard adopts Clause 1.4 (Normative References) of AS/NZS 2299.1:2015.

1.5 Definitions

1.5.1 Modified definitions

This Defence Standard adopts Clause 1.5 (Definitions) of AS/NZS 2299.1:2015, except as follows:

- The definition of '**competent person**' is replaced with the definition of competent person in regulation 5(1) of the WHS Regulations.
- The definition of '**employer**' includes a person conducting a business or undertaking as defined in the *Work Health and Safety Act 2011 (WHS Act)*.

Note: The adopted definition of 'SCUBA' in AS/NZS 2299.1:2015 refers specifically to 'open circuit' diving equipment.

This Defence Standard adopts the definitions in the AS(/NZS) 2815 training and certification series, except as follows:

- The definitions of '**occupational SCUBA diving instructor**', '**occupational SSBA diving instructor**' and '**instructor**' are modified to include an individual certified by the relevant Defence training authority to be an instructor.

1.5.2 Additional definitions

Breathing mixture means breathing gas.

Defence includes the Department of Defence and the Australian Defence Force.

Defence dive supervisor means a competent person who supervises a Defence diver and Defence high risk diving work.

Defence diver means a member of the Defence Force who carries out high risk diving work.

Defence Force means the Australian Defence Force.

Defence high risk diving work means high risk diving work carried out by a member of the Defence Force.

Defence diving member means Defence Force member who carries out Defence high risk diving work including a Defence diver and a Defence dive supervisor.

High risk diving work means ‘high risk diving work’ as defined in regulation 5(1) of the WHS Regulations.

PCBU means ‘person conducting a business or undertaking’ as defined in section 5 of the WHS Act.

This Defence Standard means this Defence High Risk Diving Work Standard.

Trainee diver means a member of the Defence Force enrolled and attending an approved Defence course for initial qualification as a Defence diver.

WHS Act means the *Work Health and Safety Act 2011 (Cth)* and includes the WHS Regulations.

WHS Regulations means the *Work Health and Safety Regulations 2011 (Cth)*.

1.5.3 Interpreting ‘shall’ and ‘should’ in Standards

In a Standard:

- ‘shall’ indicates that a statement is mandatory.
- ‘should’ indicates a recommendation.

Where a Standard adopted by this Defence Standard uses the term ‘shall’ the interpretation is ‘must’ and the statement in the Standard is mandatory under this Defence Standard and the WHS Act.

Where a Standard adopted by this Defence Standard uses the term ‘should’ the interpretation remains a recommendation. However, conforming to ‘should’ statements is highly relevant to a meeting WHS duties, particularly when it is reasonably practicable for a duty holder to conform to the Standard in the circumstances.

1.6 Relationship with legislation

1.6.1 General

This Defence Standard is approved by Comcare under regulation 183(2) of the WHS Regulations as a standard for the carrying out of high risk diving work by a member of the Defence Force.

1.6.2 Duties of person conducting business or undertaking.

In terms of regulation 183(3) of the WHS Regulations, while this Defence Standard is in force, a PCBU at a workplace where Defence high risk diving work is carried out must ensure that the following are in accordance with this Defence Standard:

- a) the fitness of Defence Force members carrying out high risk diving work;
- b) the competence of Defence Force members carrying out high risk diving work;
- c) the carrying out of Defence high risk diving work.

In terms of section 44(2) of the WHS Act, a PCBU must not direct or allow a worker to carry out work at a workplace if the WHS Regulations require the work, or class of work, to be carried out by, or under the supervision of, a person who has prescribed qualifications or experience, and the person does not have the prescribed qualifications or experience.

1.6.3 Duty of worker – competence

In terms of regulation 184(2) of the WHS Regulations, while this Defence Standard is in force, a member of the Defence Force must not carry out high risk diving work unless the member has the qualifications, knowledge, skills, and experience required by this Defence Standard.

In terms of section 44(1) of the WHS Act, a person must not carry out work at a workplace if the WHS Regulations require the work or class of work, to be carried out by, or under the supervision of, a person who has prescribed qualifications or experience and the person does not have the prescribed qualifications or experience.

1.6.4 Relevance to other WHS duties

This Defence Standard adopts sections and clauses in AS/NZS 2299.1:2015 which may not specifically relate to the fitness and competence of Defence diving members and the carrying out of Defence high risk diving work. For example, record keeping and accident investigation clauses. Wherever this occurs, the sections and clauses may not be relevant to compliance with regulation 183 but may be relevant when considering what was reasonably practicable in meeting other duties under the WHS Act and WHS Regulations.

1.6.5 Duties of dive supervisors and divers

Some paragraphs and clauses in AS/NZS 2299.1:2015 are written in a manner which tends to impose a personal obligation on dive supervisors and divers, including by using phrases such as:

- ‘Dive supervisors shall ensure...’ or ‘the dive supervisor shall ensure...’ or ‘the supervisor shall...’.¹ and
- ‘Divers shall...’ or ‘the diver shall...’ or ‘every diver shall...’.²

Where this occurs and the relevant paragraph or clause has been adopted by this Defence Standard, dive supervisors and divers must, in terms of sections 28(c) and (d) of the WHS Act, comply with any reasonable instruction and cooperate with any reasonable Defence policy or procedure which:

- correlates to the clause or paragraph;
- relates to health and safety at the workplace; and
- has been notified to the dive supervisor or diver.

There is an onus on Defence to provide information, instruction, and training to dive supervisors and divers regarding the relevant matters. Defence has the primary duty of care in relation to such matters.

1.6.6 Managing risks to health and safety

This Defence Standard requires a PCBU at a workplace at which Defence high risk diving work is carried out to manage risks to health and safety associated with the fitness and competence of Defence diving members and the carrying out of Defence high risk diving work in accordance with Part 3.1 of the WHS Regulations. (see clause 3.1.1)

Adoption of Clause 1.7

This Defence Standard adopts Clause 1.7 (Units of Measure) of AS/NZS 2299.1:2015.

Section 2 - Personnel, training and records

2.1 Dive supervisor

This Defence Standard adopts Clause 2.1 (Dive Supervisor) of AS/NZS 2299.1:2015, except as follows:

2.1.2 Qualification and training of dive supervisors

Clauses 2.1.2(a) and (b) of AS/NZS 2299.1:2015 are modified as follows:

¹ For example, in AS/NZS 2299.1:2015 clauses 2.1.3 (Duties of dive supervisors), 2.4.2 (Two divers in the water), 3.8.2 (Diving equipment – user responsibilities), 6.2.2 and 7.3.2 (Dives in water depths to 1.5m – constant visual contact).

² For example, AS/NZS 2299.1:2015 clauses 2.6.2 (Diver), 3.1.5 (Fitness to Dive), 3.13.1.1 (Diving suit), 3.13.1.2 (Diver's knife), 7.3.4 (Dive depths up to 30 m – visual contact), 8.4.2.3 (Emergency gas supply)

A dive supervisor shall be qualified and trained in accordance with the following requirements. A dive supervisor shall be as follows:

- a) Trained as a diver or have been a diver in accordance with Clause 2.2 of AS/NZS 2299.1:2015 as modified by this Defence Standard; and*
- b) A dive supervisor trained in accordance with AS/NZS 2815.5 for supervision of the type of diving operation being conducted and holding certification to that effect issued by the relevant Defence training authority.*

2.1.4 General modifications to AS/NZS 2815.5

Training and certification are not required for unnecessary competencies

This Defence Standard modifies AS/NZS 2815.5 by not requiring Defence dive supervisors to undertake training for, or achieve competencies in, or be experienced in:

- a) the use of diving equipment or systems which are not used in Defence high risk diving work;
- b) diving activities which are not carried out by Defence and which a Defence dive supervisor or diver will not be expected, directed, or required to carry out; or
- c) techniques and principles which are not applied in Defence high risk diving work and which Defence dive supervisors and divers will not need to know and will not be expected, directed, or required to use or apply.

Certification and Qualification

For the carrying out of Defence high risk diving work, this Defence Standard modifies AS/NZS 2815.5 by nominating the relevant Defence training authority as the establishment from which a Defence dive supervisor may:

- a) receive certification for meeting the applicable elements of competency and performance specified in AS/NZS 2815.5.
- b) receive qualification certification documentation for meeting the applicable elements of competency and performance specified in AS/NZS 2815.5.

2.2 Diver

This Defence Standard adopts Clause 2.2 (Diver) of AS/NZS 2299.1:2015, except as follows:

Clause 2.2(a) is modified as follows:

A diver shall be qualified and trained in accordance with the following:

- a) A diver shall be trained to a level equal to or exceeding that specified in the appropriate part of the AS(/NZS) 2815 training and certification series, as modified by this Defence Standard, and shall have certification to that effect issued by the relevant Defence training authority.*

2.2.1 General modifications to the AS(/NZS) 2815 training and certification series

Training and certification are not required for unnecessary competencies

This Defence Standard modifies the AS(/NZS) 2815 training and certification series by not requiring Defence divers to undertake training for, to be assessed on, or to achieve competencies in:

- a) the use of equipment and systems which are not used in Defence high risk diving work;
- b) diving activities which are not carried out by Defence and which a Defence diver will not be expected, directed, or required to carry out; or
- c) techniques and principles which are not applied in Defence high risk diving work and which Defence divers will not need to know and will not be expected, directed, or required to use or apply.

Certification and Qualification

For the carrying out of Defence high risk diving work, this Defence Standard modifies the AS(/NZS) 2815 training and certification series by nominating the relevant Defence training authority as the establishment from which a Defence diver may:

- a) receive certification for meeting the applicable elements of competency and performance specified in each Standard.³
- b) receive qualification certification documentation for meeting the applicable elements of competency and performance specified in each Standard.⁴

Swimming competency

This Defence Standard modifies the AS(/NZS) 2815 training and certification series so that the assessment criteria for demonstrating swimming competency⁵ do not apply to Defence divers. Instead, the Defence fitness standard, which shall include a swimming competency of at least equivalent standard to that specified in the AS(/NZS) 2815 training and competency series, shall apply.

Minimum number of dives, bottom times, and assessments

This Defence Standard modifies the AS(/NZS) 2815 training and certification series so that assessment criteria which refer to the following do not apply to the qualification and certification of Defence divers:

- a) any minimum number of individual dives or any minimum cumulation of bottom time in relation to any type of diving apparatus, breathing gas, depth, or diving condition.
- b) any minimum number of occasions an element of competency or performance criteria must be demonstrated or assessed.

Instead, in determining when a diver or dive supervisor should be certified as having attained the relevant competency, the diver or dive supervisor will be assessed in accordance with the assessment criteria in Defence's approved learning management package (LMP) for the training being undertaken, provided the level of competence achieved under the LMP is equivalent to the level of competence which would otherwise be achieved under the AS(/NZS) 2815 training and certification series.

Effective working relationships

Defence divers are not required to be trained or assessed for AS 2815.1 Unit 5 (Effective working relationships) as part of diver training if other equivalent Defence training has been undertaken by the diver.

Adoption of Clauses 2.3 to 2.6

This Defence Standard adopts the following Clauses of AS/NZS 2299.1:2015.

- Clause 2.3 - Diver's attendant
- Clause 2.4 - Standby Diver
- Clause 2.5 - First Aid Training for Dive Team
- Clause 2.6 - Records

³ For example, at clause 1.2.2 (Certification) in each of AS 2815.1:2021, AS 2815.2:2021 and AS 2815.3:2021.

⁴ For example, at clause 1.2.3 (Qualification) in each of AS 2815.1:2021, AS 2815.2:2021 and AS 2815.3:2021.

⁵ For example, at clauses 1.6(b) in each of AS 2815.1:2021, AS 2815.2:2021 and AS 2815.3:2021.

Section 3 - General procedures and equipment

3.1 Organisation and planning

This Defence Standard adopts Clause 3.1 (Organization and Planning) of AS/NZS 2299.1:2015, except as follows:

3.1.1 General

Management of risks to health and safety – Application of Part 3.1 of the WHS Regulations

The 'NOTE' in clause 3.1.1, which refers to the carrying out of hazard identification, risk assessment and control process for a diving operation being provided in Appendix D, is replaced with:

A person conducting a business or undertaking at a workplace at which Defence high risk diving work is carried out must manage risks to health and safety associated with the fitness and competence of Defence diving members and the carrying out of Defence high risk diving work in accordance with Part 3.1 of the WHS Regulations.

Appendix D to AS/NZS 2299.1:2015 may be considered as information that a duty holder knows, or ought reasonably to know, about a diving work hazard or risk, and about the ways to eliminate or minimise the risk. In determining whether a duty holder has met their duties under the WHS Act, Comcare may consider the extent to which conforming with Appendix D was reasonably practicable for the duty holder to do in the circumstances.

3.1.2 Consultation

This Defence Standard replaces clause 3.1.2 of AS/NZS 2299.1:2015 with:

Consultation must be undertaken in accordance with the consultation requirements in the WHS Act.

NOTE: Under the **Work Health and Safety Act 2011 (application to Defence activities and Defence members) Declaration 2023**, made by the Chief of the Defence Force under subsection 12D(2) of the WHS Act, certain consultation provisions of the WHS Act do not apply to Defence members.

Adoption of Clauses 3.2 to 3.11

This Defence Standard adopts the following Clauses of AS/NZS 2299.1:2015:

- Clause 3.2 - Selection of Breathing Apparatus
- Clause 3.3 - Surface Conditions
- Clause 3.4 - In-water Conditions
- Clause 3.5 - Depth of Water
- Clause 3.6 - Communication
- Clause 3.7 - Water Temperature
- Clause 3.8 - Diving Equipment
- Clause 3.9 - First Aid and Medical Equipment
- Clause 3.10 - Dive Site Requirements
- Clause 3.11 - Decompression and Dive Tables
- Clause 3.12 - Diving Before and After Travel
- Clause 3.13 - Diver's Equipment
- Clause 3.14 - Pressure Gauges
- Clause 3.15 - Pneumatic Tools

Section 4 - Breathing gas quality

4.1 General

This Defence Standard adopts Clause 4.1 (Breathing Gas Quality) of AS/NZS 2299.1:2015, except as follows:

Reference made in Clause 4.1 of AS/NZS 2299.1:2015 to Clause 4.2 (Water content) must be read in conjunction with modifications in this Defence Standard to Clause 4.2.

4.2 Water content

This Defence Standard adopts Clause 4.2 (Water Content) of AS/NZS 2299.1:2015, except as follows:

This Defence Standard modifies clause 4.2 of AS/NZS 2299.1:2015, at Note 5 and Table 4.1, so that residual water content when the breathing gas is tested should not exceed **100 mg/m³** for cylinders filled to 33,000 kPa.

4.3 Adoption of Clause 4.3

This Defence Standard adopts Clause 4.3 (Testing of Low Pressure Air for Water Content) of AS/NZS 2299.1:2015.

4.4 Breathing gas composition

This Defence Standard adopts Clause 4.4 (Breathing Gas Composition) of AS/NZS 2299.1:2015, except as follows:

4.4.2 Breathing air

This Defence Standard modifies Clauses 4.4.2 of AS/NZS 2299.1:2015 so that breathing air used in diving operations shall contain:

- no more than **800 ppm** of carbon dioxide.
- no more than **1.0 mg/m³** of oil.

4.4.3 EAN gas mixtures

This Defence Standard modifies Clauses 4.4.3 of AS/NZS 2299.1:2015 so that compressed air used in preparation of EAN, or which is to be delivered through oxygen-clean apparatus without contaminating that apparatus, shall contain:

- no more than **800 ppm** of carbon dioxide.
- no more than **1.0 mg/m³** of oil.

4.4.4 Oxygen-compatible air

This Defence Standard modifies Clauses 4.4.4 of AS/NZS 2299.1:2015 so that compressed air which is used in the preparation of EAN, or which is to be delivered through oxygen-clean apparatus without contaminating that apparatus, shall contain:

- no more than **800 ppm** of carbon dioxide.
- no more than **1.0 mg/m³** of oil.

Adoption of Clauses 4.5 to 4.6

This Defence Standard adopts the following Clauses of AS/NZS 2299.1:2015:

- Clause 4.5 - Systems for Ensuring Quality of Breathing Gas
- Clause 4.6 - Testing

Section 5 - Compression (recompression) chambers

5.1 Compression chamber support of diving

This Defence Standard adopts Clause 5.1 (Compression Chamber Support of Diving) of AS/NZS 2299.1:2015, except as follows:

5.1.2 Requirements for an on-site chamber

This Defence Standard modifies clause 5.1.2 of AS/NZS 2299.1:2015 as follows:

The definition of **'on-site'** in the NOTE to clause 5.1.2 is replaced with:

***'On-site'** means in the immediate vicinity and immediately available for use.*

The requirements of 5.1.2(a) to (f) in AS/NZS 2299.1:2015 are replaced with:

An operational recompression chamber shall be located on site when:

- a) planned decompression diving is undertaken.*
- b) free or buoyant ascent training is being conducted for trainee divers undertaking qualifying training.*
- c) diving is planned to greater than 42 m water depth.*
- d) diving exceeds the depth/time limits given in Table 5.1 of AS/NZS 2299.1:2015.*
- e) the nature of the environment or work to be conducted creates risk of extended bottom time, entrapment, or uncontrolled ascent.*
- f) where the nature of plant and equipment used during the dive or on the dive site can be reasonably foreseen to result in a substantial increase in risk.*

Adoption of Clauses 5.2 to 5.6

This Defence Standard adopts the following Clauses of AS/NZS 2299.1:2015:

- Clause 5.2 - Chamber Design, Construction, Fittings and Services
- Clause 5.3 - Chamber Operation
- Clause 5.4 - Medical Equipment
- Clause 5.5 - Transfer Under Pressure (TUP)
- Clause 5.6 - Contingency Planning for 'Worst Case Scenario' Chamber Operations

Section 6 – Specific requirements for SSBA diving operations

Adoption of Clauses 6.1 to 6.8

This Defence Standard adopts the following Clauses of AS/NZS 2299.1:2015:

- Clause 6.1 - General
- Clause 6.2 - Personnel Required
- Clause 6.3 - Rate of Ascent
- Clause 6.4 - Equipment
- Clause 6.5 - Compressed Breathing Gas Supply
- Clause 6.6 - Air Compressor Systems
- Clause 6.7 - Cylinder Gas Systems
- Clause 6.8 - Hookah

Section 7 – Specific requirements for SCUBA diving operations

7.1 General

This Defence Standard adopts Clause 7.1 (General) of AS/NZS 2299.1:2015, except as follows:

References made in Clause 7.1 of AS/NZS 2299.1:2015 to Section 3 (General procedures and equipment) and Section 4 (Breathing gas quality) must be read in conjunction with modifications to Sections 3 and 4 in this Defence Standard.

7.2 Restricted use of SCUBA

This Defence Standard adopts Clause 7.2 (Restricted Use of SCUBA) of AS/NZS 2299.1:2015, except as follows:

7.2.1 General

This Defence Standard modifies clauses 7.2.1 (a), (c) and (e) of AS/NZS 2299.1:2015 such that no dive shall be undertaken using SCUBA where:

- (a) prolonged physical exertion may be required by the diver; or
- (c) direct access to the surface cannot be maintained or there is a risk of entanglement; or
- (e) the maximum depth of the dive exceeds 30 m;

unless:

- a) the maximum depth of the dive does not exceed 50 m; and
- b) the risks associated with the dive are managed in accordance with clause 3.1.1 above.

When assessing the risks to health and safety that are posed by prolonged physical exertion, lack of direct access to the surface, and possible entanglement, Defence should be guided by Appendix D to AS/NZS 2299.1:2015 regarding hazard identification, risk assessment and control.

7.3 Personnel required

This Defence Standard adopts Clause 7.3 (Personnel Required) of AS/NZS 2299.1:2015, except as follows:

7.3.4 Dive depths up to 30 m

Under this Defence Standard clause 7.3.4 applies to SCUBA diving operations up to 50 m.

Adoption of Clauses 7.4 to 7.5

This Defence Standard adopts the following Clauses of AS/NZS 2299.1:2015:

- Clause 7.4 - Equipment
- Clause 7.5 - Lifelines and Float Lines

Section 8 – Specific requirements for EAN diving operations

Adoption of Clauses 8.1 to 8.8

This Defence Standard adopts the following Clauses of AS/NZS 2299.1:2015:

- Clause 8.1 - General
- Clause 8.2 - Oxygen – Compatible Air
- Clause 8.3 - Equipment
- Clause 8.4 - EAN Breathing Gas Mix Supply for SSBA
- Clause 8.5 - Selecting and EAN Mix
- Clause 8.6 - Preparation of EAN Mixtures
- Clause 8.7 - Compressors for EAN
- Clause 8.8 - Methods and Recording of Gas Analysis

Section 9 – Accident reporting

Adoption of Clauses 9.1 and 9.2

This Defence Standard adopts the following clauses of AS/NZS 2299.1:2015:

- Clause 9.1 - Accident Reporting
- Clause 9.2 - Investigation of Accidents and Incidents

Section 10 – Medical requirements

Adoption of Clauses 10.1 and 10.2

This Defence Standard adopts the following clauses of AS/NZS 2299.1:2015:

- Clause 10.1 - Introduction
- Clause 10.2 - Medical Assessment

Appendices

This Diving Standard adopts the Appendices of AS/NZS 2299.1:2015 as follows:

- **Appendix A - List of regulatory authorities**, adopted as information.
- **Appendix B - Example of diver's record**, adopted as an example.
- **Appendix C – Example of employer's record of diving operation**, adopted as an example.
- **Appendix D - Hazard identification, risk assessment and control**, adopted as guidance.
(Refer also to Clause 3.1.1 above)
- **Appendix E - Contents of diving operations manual**, adopted as a recommendation.
- **Appendix F – Treatment for decompression illness**, adopted as information and guidance.
- **Appendix G – Guidelines regarding exposure to altitude following diving**, adopted as information and guidance.
- **Appendix H – Typical compression chamber medical kit**, adopted as information and guidance.
- **Appendix I – Female NATO N1079 Flange**, adopted as information and guidance.
- **Appendix J – Lifeline signals**, adopted as information and guidance.
- **Appendix K – Hand signals for SCUBA diving operations**, adopted as information and guidance.
- **Appendix L - Diving Medical Examination Forms**, adopted as an example.
- **Appendix M – Guidance for medical practitioners**, adopted as a set of guidelines and recommendations.
- **Appendix N - Medical practitioners with training in diving medicine**, adopted as information and guidance.