AS 2865—1995
[NOHSC:1009(1994)]

Australian Standard®
Worksafe Australia National Standard

Safe working in a confined space

This Australian Standard was prepared by Committee SF/37, Work in Confined Spaces. It was approved on behalf of the Council of Standards Australia on 7 November 1994 and published on 5 January 1995.

The following interests are represented on Committee SF/37:

Amalgamated Metal Workers Union

Australian and New Zealand Society of Occupational Medicine

Australian Chamber of Commerce and Industry

Australian College of Occupational Medicine

Australian Institute of Occupational Hygienists

Australian Institute of Petroleum

Australian Maritime Safety Authority

Department of Employment, Industrial Relations and Training, Tas.

Department of Employment, Vocational Education, Training and Industrial Relations, Qld

Department of Labour, New Zealand

Department of Occupational Health, Safety and Welfare of Western Australia

Electricity Supply Association of Australia

Gas and Fuel Corporation of Victoria

Metal Trades Industry Association of Australia

National Occupational Health and Safety Commission

Occupational Health and Safety Authority, Vic.

Plastics and Chemicals Industry Association

Telecom Australia

WorkCover Authority of N.S.W.

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PREFACE

This Standard was prepared jointly by representatives of the National Occupational Health and Safety Commission and the Standards Australia Committee on Work in Confined Spaces to supersede AS 2865—1986. The group developing this Standard took into consideration the Victorian Occupational Health and Safety Commission's draft regulation and code of practice.

The National Occupational Health and Safety Commission is a tripartite body established by the Commonwealth Government to develop, facilitate and implement a national occupational health and safety strategy.

This includes Standards development, the development of hazard-specific preventive strategies, research, training, information collection and dissemination and the development of common approaches to occupational health and safety legislation.

The National Commission comprises representatives of the peak employee and employer bodies—the Australian Council of Trade Unions and the Confederation of Australian Industry—as well as the Commonwealth, State and Territory governments.

Consistent with the National Commission's philosophy of consultation, tripartite standing committees have been established to deal with issues relating to standards, development, research and the mining industry. Expert groups and reference groups may be established to provide advice to the standing committee on those issues with which the National Commission is concerned.

The Standard is formulated in such a way that, depending on jurisdictional requirements, the Clauses highlighted in boxes may be used as the basis of regulations and the remaining Clauses form a code of practice. Alternatively, the Standard may be called up in its entirety in a legislative framework.

The common essential requirements are those contained in boxes. An organisation which does not comply with the Standard in all respects would still be required to meet the requirements in the boxes.

The Standard was prepared to meet the need for requirements and procedures for the prevention of occupational illness, injuries and fatalities associated with persons entering and working in a confined space. It is designed not only to ensure that confined spaces are made safe for those entering them, but also to highlight the likely hazards associated with such work areas and the relevant safe work processes necessary to deal with these hazards.

The Standard emphasizes the responsibilities for safety before entry and during the entire operation. Such responsibilities cover conditions of work for an organisation's own employees as well as for any contractors or other persons on the premises. This Standard requires that adequate steps be taken to eliminate or control hazards. It also requires that all persons involved in the entry of a confined space be trained and instructed on the nature of the hazards and the precautions to be followed.

The significant changes made in this edition are as follows:

(a) An increase in the level of flammable contaminant permitted to be present in the atmosphere of a confined space before evacuation of the confined space becomes necessary from 5 percent of the lower explosive level (LEL) to 10 percent of the LEL, provided that a continuous monitoring flammable gas detector is in use.

(b) A requirement to perform a risk assessment of confined spaces before carrying out any work which requires entry to the confined space. Where a number of identical confined spaces are present, a single (generic) assessment is permitted where the risks are considered to be the same for each space.

(c) The use of an entry permit as the form of approval for entry to the confined space. The use of documented standing orders had not reached widespread acceptance.

(d) An increase in the minimum concentration of oxygen in the atmosphere within a confined space from 18 percent to 19.5 percent by volume. In addition, a maximum concentration of oxygen in the atmosphere within a confined space of 23.5 percent by volume has been specified.

Appendices are included to provide guidance for the conduct of specific tasks in a confined space (for example, cleaning and hot work). These recommendations list only the special additional precautions that need to be followed when such tasks are undertaken in a confined space.

During development of this Standard, reference was made to the documents listed below and acknowledgment is made of the assistance received therefrom:

1. INTERNATIONAL LABOUR OFFICE (ILO), *Encyclopaedia of Occupational Health and Safety—Confined Spaces*.
2. *Entering Tanks and Other Enclosed Spaces*, CIS Information Sheet No. 6.
3. *Safety Requirements for Working in Confined Spaces*, ANSI Z117.1–19[illegible].
4. *Criteria for a Recommended Standard—Working in Confined Spaces*, United States National Institute for Occupational Safety and Health (NIOSH).
5. UNITED KINGDOM HEALTH AND SAFETY EXECUTIVE, Guidance Note GS5.
6. NATIONAL OCCUPATIONAL HEALTH AND SAFETY COMMISSION. *Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment* [NOHSC:1003(1991)]. Australian Government Publishing Service, Canberra, 1991.

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STANDARDS AUSTRALIA/WORKSAFE AUSTRALIA

Australian Standard

Safe working in a confined space

1 SAFE WORKING IN A CONFINED SPACE This Standard may be cited as the *Joint National Standard for Safe Working in a Confined Space.*

2 OBJECTIVES The objectives of this Standard are to provide guidance to:

(a) eliminate or, where this is not practicable, minimize the need to enter confined spaces; and

(b) provide for the health and safety of all persons who need to enter or work in confined spaces by preventing exposure to hazards which may otherwise be experienced when working in a confined space, and thereby prevent collapse, injury, illness or death arising from exposure to those hazards.

3 SCOPE This Standard sets out the particular requirements and procedures for designers, manufacturers, suppliers, modifiers, employers, persons in control and employees to ensure the health and safety of any persons required to enter or work in a confined space. For the purpose of this Standard, a person whose upper body or head is within a confined space is considered to have entered the confined space.

NOTE: This is not intended to prevent a person from inserting their hand or arm while holding a test instrument or probe into a confined space as part of the evaluation prior to entry.

Requirements and procedures for ensuring general occupational health and safety, for example, welding safety and prevention of slips and falls, are dealt with in other Standards and regulations rather than being specifically addressed in this Standard. It should be noted that a confined space may exacerbate other hazards, for example, noise or heat stress.

This Standard is framed to help designers, manufacturers, suppliers, modifiers and users where confined spaces are involved to achieve a high safety standard. It is not exhaustive in its coverage, but it is intended to cover those areas which are of particular concern in the workplace. It will be necessary for persons who require further information to research various other legislation, standards, codes and guidance notes.

This Standard is not intended to cover situations which are not at atmospheric pressure, such as work in decompression chambers. At pressures significantly higher or lower than the normal atmospheric pressure, expert guidance should be sought.

Specific workplaces, for example, dangerous goods storage areas, may be subject to other standards, regulations or codes of practice.

4 APPLICATION This Standard is applicable to confined spaces as defined in Section 6.2. The Standard does not apply to underground mining and tunnelling construction, nor does it apply to work which is carried out at other than normal atmospheric pressure.

Emergency services are exempted from the written procedures for the duration of the emergency.

5 REFERENCED DOCUMENTS A list of referenced documents is given in Appendix A.