



Occupational Health and Safety (Maritime Industry) (National Standards) Amendment Regulations 2010 (No. 1)¹

Select Legislative Instrument 2010 No. 62

I, QUENTIN BRYCE, Governor-General of the Commonwealth of Australia, acting with the advice of the Federal Executive Council, make the following Regulations under the *Occupational Health and Safety (Maritime Industry) Act 1993*.

Dated 14 April 2010

QUENTIN BRYCE
Governor-General

By Her Excellency's Command

JULIA GILLARD
Minister for Employment and Workplace Relations

1 Name of Regulations

These Regulations are the *Occupational Health and Safety (Maritime Industry) (National Standards) Amendment Regulations 2010 (No. 1)*.

2 Commencement

These Regulations commence on the day after they are registered.

3 Amendment of *Occupational Health and Safety (Maritime Industry) (National Standards) Regulations 2003*

Schedule 1 amends the *Occupational Health and Safety (Maritime Industry) (National Standards) Regulations 2003*.

Schedule 1 Amendment

(regulation 3)

[1] After Part 3

insert

Part 4 Confined spaces

Note Under subsection 109 (1) of the Act, if the Minister approves a code of practice for confined spaces, it can be used to provide practical guidance to operators.

Division 1 Preliminary

4.01 Interpretation

(1) In this Part:

atmospheric monitoring means continuous measurement, over an uninterrupted duration of time, of:

- (a) the concentration of oxygen; or
- (b) airborne contaminants.

atmospheric testing means measurement, that is not continuous, of:

- (a) the concentration of oxygen; or
- (b) airborne contaminants.

competent person means a person who:

- (a) has, by a combination of training, education and experience, acquired knowledge and skills to enable him or her to:
 - (i) make an informed assessment of the likelihood of an airborne contaminant being present or subsequently arising in a confined space; or
 - (ii) correctly perform a specific task associated with a confined space; and

- (b) meets any specific requirements imposed by a State or Territory law in relation to making the assessment or performing the specific task.

confined space means an enclosed space or partially enclosed space:

- (a) that is, or is intended to be, at normal atmospheric pressure while a person is in the space; and
- (b) that is not intended or designed primarily for human occupancy; and
- (c) within which there is a risk of 1 or more of the following:
- (i) an oxygen concentration outside the safe oxygen range;
 - (ii) an airborne contaminant that could cause impairment, loss of consciousness or asphyxiation;
 - (iii) a flammable airborne contaminant that could cause injury from fire or explosion;
 - (iv) engulfment in a stored free flowing solid or a rising level of liquid that could cause suffocation or drowning;

whether or not the space has a restricted means of entry or exit.

contaminant means a dust, fume, mist, vapour, biological matter, gas or other substance in liquid or solid form, which could be harmful to persons.

flammable airborne contaminant means a dust, fume, mist, vapour or gas present in the air at concentrations that can propagate a flame on contact with an ignition source.

hazard means a source of potential harm.

HSIS means the Hazardous Substances Information System that is published on Safe Work Australia's website.

LEL has the meaning given by regulation 4.02.

permit to work has the meaning given by regulation 4.23.

personal protective equipment means equipment used by a person for their protection, including protective clothing, safety helmets, eye and face protection, hearing protection, gloves, safety footwear, lifelines, safety harnesses, breathing apparatus and respirators.

risk assessment means the process of evaluating the possibility and consequences of injury or illness arising from exposure to an identified hazard or identified hazards.

risk control means the process of managing the elimination or minimisation of the likelihood that a substance will cause harm to health in the circumstances of its use.

safe oxygen range means, under normal atmospheric pressure, a minimum oxygen content in the atmosphere of 19.5% by volume and a maximum oxygen content in the atmosphere of 23.5% by volume.

stand-by person means a person who performs the role mentioned in regulation 4.19.

- (2) A person is taken to have **entered** a confined space if the person's head or upper body is within the boundary of the confined space.

Note Inserting an arm into a confined space for the purpose of atmospheric testing or monitoring is not considered an entry into the confined space.

4.02 Explosive limit

The **LEL** of a flammable contaminant is the concentration of the contaminant in air below which the propagation of a flame does not occur on contact with an ignition source.

Note A flammable contaminant has a lower explosive limit (**LEL**) and an upper explosive limit (**UEL**). This Part refers only to lower explosive limits.

4.03 Exposure standard

- (1) The **exposure standard** for a substance means the airborne concentration of the substance in a person's breathing zone, as described in the HSIS.
- (2) The exposure standard may be expressed as:
- time-weighted average (**TWA**), which is the average airborne concentration of a particular substance calculated over a period of time; or
 - peak exposure limit, which is the maximum or peak airborne concentration of a particular substance that is determined over the shortest analytically practicable period of time that does not exceed 15 minutes; or

- (c) short-term exposure limit, which is a 15 minute TWA exposure that should not be exceeded at any time during a work day even if the 8-hour TWA for that work day is within the TWA exposure standard.
- (3) Exposure at the short-term exposure limit must not be repeated more than 4 times in a day.
- (4) There must be at least 60 minutes between successive exposures at the short-term exposure limit.
- (5) In this regulation:
8-hour TWA means a TWA calculated over an 8-hour work day for a 5-day working week.

Division 2 Duties of operators

Subdivision 1 Securing confined spaces

4.04 Entry and exit points

- (1) The operator of a prescribed ship or prescribed unit must ensure that:
 - (a) the entry points to a confined space are secured against unauthorised entry; and
 - (b) if practicable — the entry points to the confined space are permanently sign posted.

Penalty: 10 penalty units.

- (2) The operator of a prescribed ship or prescribed unit must ensure that entry and exit points from confined spaces are not obstructed by fittings or equipment that would impede rescue.

Penalty: 10 penalty units.

- (3) An offence against subregulation (1) or (2) is an offence of strict liability.

4.05 Work practices and confined spaces

- (1) The operator of a prescribed ship or prescribed unit must design work practices to minimise the need to enter confined spaces.

Penalty: 10 penalty units.

- (2) An offence against subregulation (1) is an offence of strict liability.

4.06 Modifications to confined space

- (1) If a confined space on a prescribed ship or prescribed unit is to be modified, the operator of the prescribed ship or prescribed unit must modify the space in a way that does not detrimentally affect the safe means of entry to, exit from or work in the confined space.

Penalty: 10 penalty units.

- (2) An offence against subregulation (1) is an offence of strict liability.

Subdivision 2 Hazard identification and risk assessment

4.07 Hazard identification

Before any work is undertaken in a confined space the operator of a prescribed ship or prescribed unit must ensure that a competent person identifies hazards associated with entry to, exit from or work in the confined space.

Penalty: 10 penalty units.

4.08 Risk assessment

- (1) The operator of a prescribed ship or prescribed unit must not issue a permit to work for work in a confined space until a competent person has:

- (a) undertaken a risk assessment for the work in the confined space; and
- (b) prepared a written report of the risk assessment including the matters mentioned in subregulation (3).

Penalty: 10 penalty units.

- (2) A risk assessment may be used as the risk assessment for more than 1 confined space only if:
 - (a) all confined spaces covered by the risk assessment are similar; and
 - (b) the risk factors for all confined spaces covered by the risk assessment are identical.
- (3) A risk assessment must include the following matters:
 - (a) the nature of the confined space;
 - (b) the inherent hazards of the confined space;
 - (c) work that is to be carried out in the confined space, including whether it is necessary to enter the confined space to carry out the work;
 - (d) the methods by which the work can be carried out;
 - (e) the estimated duration of the work;
 - (f) hazards and associated risks of:
 - (i) the method of work selected; and
 - (ii) the equipment proposed to be used;
 - (g) any potential hazard inside the confined space;
 - (h) emergency response procedures;
 - (i) the competency of persons needed to undertake the work.
- (4) An offence against subregulation (1) is an offence of strict liability.

Note Regulation 4.29 sets out the period for which a risk assessment must be kept.

4.09 When risk assessment ceases to be valid

- (1) If evidence is available to the operator of a prescribed ship or prescribed unit that a risk assessment does not address, or no longer addresses, the risks posed by a confined space that is covered by the risk assessment, the risk assessment ceases to be valid.

Examples of evidence

- 1 The installation or modification of plant.
- 2 A change in equipment operating conditions.
- 3 A change in the atmosphere or occupational environment.
- 4 A change in working arrangements or procedures.
- 5 An incident that affects, or could affect, the safety of persons.

- (2) If the risk assessment ceases to be valid, the operator of a prescribed ship or prescribed unit must arrange for a competent person to review the risk assessment.

Penalty: 10 penalty units.

- (3) After the risk assessment has been reviewed under subregulation (2), the operator of a prescribed ship or prescribed unit must make any necessary changes, in writing, to the risk assessment and the permit to work.

Penalty: 10 penalty units.

- (4) An offence against subregulation (2) or (3) is an offence of strict liability.

Note Regulation 4.29 sets out the period for which a risk assessment must be kept.

4.10 Atmospheric testing

- (1) Before a person enters or works in a confined space, the operator of a prescribed ship or prescribed unit must ensure that the atmosphere in and near the confined space is tested by a competent person.

Penalty: 10 penalty units.

- (2) The operator of a prescribed ship or prescribed unit must keep a record of atmospheric testing that is carried out in relation to a confined space.

Note Regulation 4.29 sets out the period for which a record of atmospheric testing must be kept.

4.11 Atmospheric monitoring

- (1) This regulation applies if a risk assessment for a confined space identifies risks requiring atmospheric monitoring in and near the confined space.
- (2) During work in the confined space the operator of a prescribed ship or prescribed unit must ensure that atmospheric monitoring in and near the confined space is conducted by a competent person in a manner consistent with the risk assessment.

Penalty: 10 penalty units.

4.12 Safe atmosphere

- (1) Subregulation (2) does not apply to an entry into a confined space for the purpose of responding to an emergency.
- (2) Before a person enters a confined space, the operator of a prescribed ship or prescribed unit must ensure that:
 - (a) the space is at normal atmospheric pressure; and
 - (b) the level of oxygen in the confined space is within the safe oxygen range; and
 - (c) airborne contaminants in the confined space are at a level below the relevant exposure standards; and
 - (d) the confined space is free from extremes of temperature; and
 - (e) the concentration of any flammable airborne contaminant is below 5% of its LEL.

Penalty: 10 penalty units.

Subdivision 3 Risk control measures

4.13 Elimination or control of risk

- (1) If a risk assessment identifies a risk to health or safety arising from entry to or work in a confined space, the operator of a prescribed ship or prescribed unit must:
 - (a) eliminate the risk; or
 - (b) if it is not reasonably practicable to eliminate the risk — take measures, in accordance with this regulation, to control the risk.

Penalty: 10 penalty units.

- (2) Risk control measures should be undertaken in the following order of priority:
 - (a) elimination;
 - (b) substitution;
 - (c) isolation;
 - (d) engineering controls;
 - (e) administrative controls;
 - (f) use of personal protective equipment.
- (3) The operator of a prescribed ship or prescribed unit must document the measures in subregulation (2) that are taken to address a risk identified in a risk assessment.

Penalty: 10 penalty units.

- (4) Personal protective equipment should be used:
 - (a) when all of the other risk control measures (individually or in combination) have failed to adequately control the risk; or
 - (b) in an emergency response.
- (5) If personal protective equipment is needed for an individual, the operator of a prescribed ship or prescribed unit must ensure that it is fitted to suit the individual.

Penalty: 10 penalty units.

4.14 **Using purging agent**

If a confined space must be cleared of an airborne contaminant, the operator of a prescribed ship or prescribed unit must ensure that:

- (a) the contaminant is removed by using a suitable purging agent; and
- (b) the purging agent is not pure oxygen or a gas mixture with an oxygen content greater than 21% by volume.

Penalty: 10 penalty units.

4.15 **Gas used for ventilation purposes**

The operator of a prescribed ship or prescribed unit must ensure that gas used for ventilation purposes is not pure oxygen or a gas mixture with an oxygen content greater than 21% by volume.

Penalty: 10 penalty units.

4.16 **Isolating hazardous services**

- (1) An operator of a prescribed ship or prescribed unit must ensure that, before a person enters or works in a confined space, all potentially hazardous services including all process services normally connected to that space are positively isolated in order to prevent:
 - (a) the introduction of materials, contaminants, agents or conditions harmful to persons in the confined space; and
 - (b) the activation or energising of equipment or services which could pose a risk to the health or safety of persons within the confined space.

Penalty: 10 penalty units.

- (2) In this regulation:

process services includes hot water pipes, sewer pipes and gas pipes.

4.17 Flammable airborne contaminants

- (1) Subregulation (2) does not apply to entry into a confined space for the purpose of responding to an emergency.
- (2) Before a person enters a confined space where a flammable contaminant is present in the atmosphere the operator of a prescribed ship or prescribed unit must ensure that:
 - (a) the concentration of any flammable airborne contaminant is less than 5% of its LEL; and
 - (b) the oxygen content of the atmosphere is no more than 23.5%.

Penalty: 10 penalty units.

- (3) If, after 1 or more persons have entered and are working in a confined space, the concentration of a flammable contaminant in the atmosphere of the confined space is found to be 5%, or greater than 5% and less than 10%, of its LEL, the operator of a prescribed ship or prescribed unit must ensure that:
 - (a) the person or persons are removed from the confined space; or
 - (b) there is continuous monitoring with a suitably calibrated detector for the flammable contaminant in the confined space at all times when the person or persons are present in the confined space.

Penalty: 10 penalty units.

- (4) If the concentration of a flammable contaminant in the atmosphere in a confined space is found to be 10% or greater of its LEL, the operator of a prescribed ship or prescribed unit must ensure that all persons are removed from the confined space.

Penalty: 10 penalty units.

4.18 Supplied-air respiratory equipment

- (1) Subregulation (2) applies if, after all risk control measures have been undertaken for a confined space:
 - (a) the oxygen content in the atmosphere in the confined space is 19.5% or less; or

- (b) the airborne contaminants in the confined space cannot be reduced to a level below the relevant exposure standards.
- (2) The operator of a prescribed ship or prescribed unit must ensure that a person does not enter or work in the confined space unless they are equipped with supplied-air respiratory equipment that is:
 - (a) maintained in a proper working condition; and
 - (b) fitted to suit the person who is to use it.

Penalty: 10 penalty units.

4.19 Stand-by person

If a risk assessment identifies a risk to health or safety arising from entry to or work in a confined space, the operator of a prescribed ship or prescribed unit must ensure that at least 1 competent person:

- (a) acts as a stand-by person; and
- (b) is near the confined space when it is occupied for work, and
- (c) can:
 - (i) if practicable, see each person in the confined space; and
 - (ii) be in continuous communication with each person in the confined space; and
 - (iii) communicate with the officer of the watch; and
 - (iv) operate and monitor equipment used to ensure safety during work in the confined space; and
 - (v) initiate emergency response arrangements.

Penalty: 10 penalty units.

4.20 Equipment to be provided

- (1) The operator of a prescribed ship or prescribed unit must provide the equipment identified in the permit to work as necessary for work in the confined space.

Penalty: 10 penalty units.

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- (2) The operator of a prescribed ship or prescribed unit must ensure that equipment provided for entry to or work in the confined space is:
 - (a) accessible; and
 - (b) suitable for the work to be carried out.

Penalty: 10 penalty units.

- (3) An offence against subregulation (2) is an offence of strict liability.

4.21 Equipment — maintenance

- (1) The operator of a prescribed ship or prescribed unit must ensure that equipment provided for use in, or in connection with, entry to or work in a confined space or during an emergency response is maintained as fit for the purpose for which it was provided.

Penalty: 10 penalty units.

- (2) The operator of a prescribed ship or prescribed unit must make a record of the maintenance of the equipment.

Note Regulation 4.29 sets out the period for which the record must be kept.

4.22 Emergency and first aid procedures

- (1) The operator of a prescribed ship or prescribed unit must ensure that emergency and first aid procedures appropriate to a confined space are in a written document available to all persons who may enter or work in the confined space.

Penalty: 10 penalty units.

Note Regulation 4.29 sets out the period for which the document must be kept.

- (2) The operator of a prescribed ship or prescribed unit must ensure that a person who may enter or work in a confined space has practised the emergency procedures before the person enters or works in the confined space.

Penalty: 10 penalty units.

- (3) The operator of a prescribed ship or prescribed unit must ensure that before a person, who will be involved in an emergency response in a confined space, enters the confined space, the person is informed about:
- (a) the nature of the emergency; and
 - (b) the content of the permit to work in the confined space; and
 - (c) the hazards and the risks identified in the risk assessment for the confined space.

Penalty: 10 penalty units.

Division 3 Permit to work

4.23 Permit to work

- (1) A *permit to work*, for a confined space, is a document, issued by the operator of a prescribed ship or prescribed unit, that identifies the following:
- (a) the location of the confined space;
 - (b) the person who has direct control of entry to or work in the confined space;
 - (c) the work to be conducted in the confined space;
 - (d) the hazards in the confined space;
 - (e) the risk control measures necessary for safe entry and work in the confined space;
 - (f) the persons required to enter or work in the confined space;
 - (g) the period of validity of the permit;
 - (h) if 1 or more stand-by persons is required — the number of stand-by persons required;
 - (i) equipment required for work in the confined space, including equipment for the following purposes:
 - (i) personal protection;
 - (ii) emergencies;
 - (iii) rescue;
 - (iv) first aid;

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- (v) communication;
 - (vi) fire suppression;
 - (vii) ventilation;
 - (viii) lifting;
 - (ix) lighting.
- (2) The operator of a prescribed ship or prescribed unit must keep a record of all persons:
- (a) permitted to enter or work in a confined space under a permit to work; and
 - (b) who enter into and exit from a confined space.
- Note* Regulation 4.29 sets out the period for which:
- (a) a permit to work must be kept; and
 - (b) the record must be kept.

4.24 Operator's duty — permit to work required for entry to or work in confined space

- (1) Subregulations (2) to (4) do not apply to an entry to or work in a confined space for the purpose of responding to an emergency.
- (2) The operator of a prescribed ship or prescribed unit must ensure that no person enters or works in a confined space unless there is a valid permit to work for the confined space.
- Penalty: 10 penalty units.
- (3) The operator of a prescribed ship or prescribed unit must ensure that no person enters or works in a confined space unless the person is identified on a valid permit to work as a person who may work in the confined space.
- Penalty: 10 penalty units.
- (4) The operator of a prescribed ship or prescribed unit must ensure that before a person enters the confined space the person is informed about the content of the permit to work for the confined space.
- Penalty: 10 penalty units.

- (5) A permit to work is valid:
 - (a) if the permit to work has not expired; and
 - (b) if a risk assessment under regulation 4.08 has been completed; and
 - (c) if regulation 4.09 applies, the risk assessment for the work in the confined space has been reviewed and noted in the report of the risk assessment.

4.25 Employee's duty — entry to or work in confined space

- (1) Subregulations (2), (3) and (5) do not apply to an entry to or work in a confined space for the purpose of responding to an emergency.

- (2) An employee must not enter a confined space unless the employee is identified on a valid permit to work for the confined space as a person who may enter the confined space.

Penalty: 10 penalty units.

- (3) An employee must not work in a confined space unless the employee is identified on a valid permit to work for the confined space as a person who may work in the confined space.

Penalty: 10 penalty units.

- (4) An employee must carry out work in a confined space in accordance with his or her training.

Penalty: 10 penalty units.

- (5) An employee must carry out work in a confined space in accordance with the requirements of the permit to work for the confined space.

Penalty: 10 penalty units.

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- (6) An employee must report to the operator of a prescribed ship or prescribed unit any matter, including defects in equipment, that may affect the operator's compliance with the provisions of this Part as soon as practicable after becoming aware of the matter.

Penalty: 10 penalty units.

- (7) An offence against subregulation (2), (3), (4), (5) or (6) is an offence of strict liability.

4.26 When permit to work ceases to be valid

- (1) A permit to work ceases to be valid if, at any time during the work permitted by the permit to work:
- (a) there is a change:
 - (i) of person who has direct control of entry to or work in the confined space; or
 - (ii) in the work permitted under the permit to work; or
 - (b) the risk assessment ceases to be valid; or
 - (c) there is a break in work continuity.
- (2) If a permit to work ceases to be valid, the operator of a prescribed ship or prescribed unit must ensure that:
- (a) the confined space is evacuated; and
 - (b) the entrance to the confined space is closed or secured to prevent re-entry until there is another or revalidated permit to work for work in the confined space.

Penalty: 10 penalty units.

4.27 Withdrawal of permit to work

- (1) The operator of a prescribed ship or prescribed unit may withdraw a permit to work after ensuring that:
- (a) work in the confined space has ceased; and
 - (b) all persons have left the confined space.

- (2) Before withdrawing the permit to work, the operator of a prescribed ship or prescribed unit must acknowledge in writing that:
- (a) work in the confined space has ceased; and
 - (b) all persons have left the confined space.

Penalty: 10 penalty units.

Division 4 Training

4.28 Requirement for training

- (1) The operator of a prescribed ship or prescribed unit must provide the following general training for all persons who are required to work in or on a prescribed ship or prescribed unit:
- (a) the nature of confined spaces;
 - (b) hazard identification and risk assessment procedures for confined spaces;
 - (c) the requirements of a permit to work;
 - (d) the stand-by role.

Penalty: 10 penalty units.

- (2) The operator of a prescribed ship or prescribed unit must provide the following specific training to persons who might enter or work in a confined space or are responsible for direct control of work in the confined space:
- (a) safety equipment;
 - (b) risk control measures;
 - (c) emergency response procedures.

Penalty: 10 penalty units.

- (3) The operator of a prescribed ship or prescribed unit must ensure that each person who performs any of the following roles in relation to a confined space, receives specific training in the performance of that role:
- (a) hazard identification;
 - (b) risk assessment;
 - (c) atmospheric testing and monitoring;

(d) the stand-by role.

Penalty: 10 penalty units.

- (4) For all training provided the operator of a prescribed ship or prescribed unit must make a written record of the following matters:
- (a) the name of the training course;
 - (b) if the course is registered or accredited by a statutory body, government department, educational institution or other organisation — the name of the statutory body, government department, educational institution or organisation;
 - (c) if the course is not registered or accredited by a statutory body, government department, educational institution or other organisation:
 - (i) an outline of its contents; and
 - (ii) its duration; and
 - (iii) the names, qualifications and experience of persons providing the training;
 - (d) names of persons who received training and the dates of attendance;
 - (e) competencies attained by the trained persons.

Note Regulation 4.29 sets out the period for which records must be kept.

Division 5 Records

4.29 Period for which records must be kept

- (1) The operator of a prescribed ship or prescribed unit must keep the records mentioned in column 2 of an item in the table for the period mentioned in column 3 of the item.

Penalty: 10 penalty units.

(2) An offence against subregulation (1) is an offence of strict liability.

Item	This record ...	must be kept for ...
1	risk assessment (see regulation 4.08)	5 years after the time when it ceased to be valid
2	changes to a risk assessment (see regulation 4.09)	5 years after the time when it ceased to be valid
3	a record of atmospheric testing (see regulation 4.10)	5 years
4	a record of maintenance of equipment (see regulation 4.21)	5 years
5	emergency and first aid procedures (see regulation 4.22)	5 years
6	permit to work (see regulation 4.23)	30 days after the time when it ceased to be valid or was withdrawn
7	a record of all persons: (a) permitted to enter or work in a confined space under a permit to work; and (b) who enter into and exit from a confined space (see regulation 4.23)	5 years after the time when the permit ceased to be valid or was withdrawn
8	a record of training (see regulation 4.28)	5 years after the end of the period of employment of the person who received the training

4.30 Records must be available for inspection

(1) The operator of a prescribed ship or prescribed unit must ensure that the records mentioned in regulation 4.29 are made available to an inspector on request by the inspector.

Penalty: 10 penalty units.

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- (2) The operator of a prescribed ship or prescribed unit must ensure that a record mentioned in the table in regulation 4.29 is made available on request by an employee to whom the record relates.

Note

1. All legislative instruments and compilations are registered on the Federal Register of Legislative Instruments kept under the *Legislative Instruments Act 2003*. See <http://www.frli.gov.au>.