



Tasmania

INFORMATION SHEET

PRESSURE PIPING GUIDANCE

What is pressure piping?

The Tasmanian *Workplace Health and Safety Act 1995* (the Act) defines *plant* to ‘include any machinery, equipment, scaffolding, amusement structure, appliance, implement or tool and any component or fitting of any of those things’, and includes pressure piping.

Pressure piping includes:

- equipment that is an assembly of pipes, pipe-fittings, valves and pipe accessories subject to internal or external pressure, and used to contain or convey fluid or to transmit fluid pressure
- distribution headers, bolting, gaskets, pipe supports and pressure retaining accessories.

Pressure piping does not include:

- any vessel that falls within the definition of a boiler or pressure vessel under the *Workplace Health and Safety Regulations 1998* (the Regulations)
- any pipeline covered by any other legislation.

Legal Requirements

The Act sets out general duties and obligations regarding plant safety and safe systems of work associated with plant.

Apart from these, it is the responsibility of the accountable person to ensure that pressure piping are designed, manufactured, repaired, installed and tested to ensure compliance with Australian Standard AS 4041 *Pressure piping* (or to another recognised standard acceptable to the Director of Industry Safety).

This guidance covers the requirements under the Act and Regulations for pressure piping that is categorised as hazard level A, B, C, D and E according to AS 4343 *Pressure equipment – Hazard levels*.

Hazard Levels

Your first step therefore is to calculate the hazard level of the proposed pressure pipeline according to AS 4343.

If the pressure pipeline is Hazard level A or B

The competent person would:

- undertake the design
- obtain independent verification of the design
- view, identify and confirm the various materials used to manufacture the pressure piping
- view the material specification certificates
- supervise welding procedures tests (as applicable) and inspect the finished procedure before a non-destructive examination has been conducted (by a competent person)
- carry out field inspections of welds (unless a ‘welding supervisor’ has been appointed)

- witness the final hydrostatic testing, unless a non-destructive examination has been conducted in accordance with and as required by AS 4041 (or another recognised standard acceptable to the Director of Industry Safety)

The accountable person would:

- retain all relevant information for compliance audits and future reference (see *Record keeping, below*).

If the pressure pipeline is Hazard level C, D or E

The competent person would:

- undertake the design
- audit the pressure piping to ensure compliance with AS 4041 (or another recognised standard acceptable to the Director of Industry Safety).

The accountable person would:

- retain material specification certificates
- ensure auditing has been done by a competent person (see above)
- take any action resulting from the audit
- retain all relevant information for compliance audits and future reference (see *Record keeping, below*).

Note

Please note that where a competent person is not available, the accountable person may choose to contact a Registered Plant Inspector (who has any of the plant inspection registered codes CPV, CPVB, FPV and FPVB) for advice on pressure piping.

A list of Registered Plant Inspectors is available by contacting the Workplace Standards Helpline on 1300 366 322 or on line at <http://www.workcover.tas.gov.au/workcoverpublish/attach/gb085rpisept.pdf>

Testing

Ensure all weld procedures used in any installation or repair of pressure pipelines are current and comply with the testing requirements outlined in AS/NZS 3992: 1998 – *Pressure equipment – Welding and brazing qualifications* (or other recognised standard acceptable to the Director of Industry Safety).

Testing should be:

- conducted by someone certified by the National Association of Testing Authority (or a competent person holding an equivalent certification)
- done before starting any installation work.

Record keeping

The extent of the record keeping will depend on the hazard level of the pipeline. These may include:

- design drawings
- calculations and specifications
- manufacturing procedure
- weld procedure test results
- material test certificates
- non-destructive examination reports
- testing done before the pressure piping is placed into service.

Record keeping applies to any:

- new pressure piping
- repairs or alterations to existing pressure piping

It is the responsibility of the accountable person to ensure records are:

- retained for the service life of the pressure piping
- available upon request for audit purposes by authorised officers from Workplace Standards Tasmania
- kept in accordance with AS 4041 (or another recognised standard acceptable to the Director of Industry Safety)..

The preparation of all necessary documentation, and any relevant inspections and testing, are to have been undertaken by a competent person before any pressure piping is placed into service.

It is not mandatory to register the design of pressure piping.

Definitions

Accountable person — Any person under regulation 5 of the Regulations who is responsible for the management or control of the relevant place at which work is undertaken. This includes any person temporarily acting in such a position. However

- the term ‘accountable person’ is used extensively throughout the regulations and refers to people who have obligations under the Act
- where a regulation requires an accountable person to do something, reference must be made to the Act to determine if an obligation that is relevant to the regulation is imposed and if so, who is responsible for meeting that obligation.
- the obligation bearer is the accountable person for the specific regulation
- there can be multiple obligation bearers (accountable persons) for any one regulation.
- an accountable person for one regulation may not necessarily be so for others. Each regulation needs to be checked against obligations contained in the Act.

Competent person — a person with sufficient knowledge and skills acquired through qualification, training or experience to perform the task to which the term relates.

Designer — a person who designs or is responsible for the design of plant used or intended to be used in the workplace.

Design verifier — a competent person who is independent of the designer and is responsible for verifying that the design complies with the standard used by the designer.

Welding supervisor — a person who holds accreditation in accordance with Australian Standard AS 1796 *Certification of welders and welding supervisors* (or other recognised standard acceptable to the Director of Industry Safety).