

Australian Standard™

Pipelines—Gas and liquid petroleum

Part 3: Operation and maintenance



S t a n d a r d s A u s t r a l i a

This Australian Standard was prepared by Committee ME-038, Petroleum Pipelines. It was approved on behalf of the Council of Standards Australia on 27 July 2001 and published on 6 August 2001.

The following interests are represented on Committee ME-038:

Australian Corrosion Association
Australian Gas Association
Australian Institute of Petroleum
Australian Petroleum Production and Exploration Association
Australian Pipeline Industry Association
Bureau of Steel Manufacturers of Australia
Cooperative Research Centre for Materials, Welding and Joining
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Part 3: Operation and maintenance

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PREFACE

This Standard was prepared by the joint Standards Australia/Standards New Zealand Committee ME-038, Petroleum Pipelines, to supersede AS 2885.3 —1997.

This Standard is the result of a consensus among Australian and New Zealand representatives on the Joint Committee to produce it as an Australian Standard.

This Standard has been reviewed and revised to correlate with the requirements of Safety Case.

Due to significant changes in the industry and the regulatory environment, the Standard has been restructured, and is based on Pipeline Integrity Management philosophy.

Changes have been made to the Standard to enable it to be viewed as a stand-alone document whilst retaining and strengthening the references to AS 2885.1 and AS 2885.2.

The readability of the document has been improved by drawing together like requirements into common sections, by improving the cross-references and by applying a consistent style to the structure and wording.

The most important changes include the following:

- (a) The addition of Pipeline Integrity Management principles.
- (b) A major review of the Operating Condition Changes section.
- (c) The inclusion of a records management process.
- (d) Responsibilities of the operating authority have been clarified.
- (e) Risk Assessment process has been further integrated.
- (f) Contents of Safety and Operating Plan have been clarified.
- (g) Approval requirements have been identified and listed in Appendix C.
- (h) The development of a threat mitigation section.
- (i) A revision of the Cathodic Protection section.
- (j) The introduction of a Safety and Environment section.
- (k) The inclusion of signage maintenance
- (l) Coverage of SCADA maintenance.

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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STANDARDS AUSTRALIA
Australian Standard
Pipelines—Gas and liquid petroleum

Part 3: Operation and maintenance

SECTION 1 SCOPE AND GENERAL

1.1 SCOPE

This Standard specifies the minimum requirements for the operation and maintenance of pipelines complying with AS 2885.1 and AS 2885.2.

1.2 BASIS OF STANDARD

The purpose of the AS 2885 series of Standards is detailed in Part 1.

The basis of this part of the AS 2885 series of Standards is to provide important principles, practices and practical guidelines for use by competent persons and organizations involved in the operation and maintenance of high-pressure petroleum pipelines.

The fundamental principles on which this Part is based are the following:

- (a) Important matters relating to safety, engineering design, materials, testing and inspection to be reviewed and approved by a responsible entity, referred to as the operating authority. The responsible entity to be defined in each case.
- (b) Operation and maintenance practices to be implemented to provide for continued monitoring and safe operation of the pipeline.
- (c) Where the Standard does not provide detailed requirements appropriate to a specific item, the principles and guidelines set out in the Standard to be the basis on which an engineering assessment is made. Specific requirements of the Standard do not replace the need for appropriate experience and engineering judgement.

1.3 APPLICATION

The requirements of this Standard apply to the operation and maintenance of pipelines designed in accordance with AS 2885.1.

This Standard is not intended to be applied retrospectively to existing pipelines that have not been modified unless the following requirements are met:

- (a) The requirements of this Standard shall apply to the operation and maintenance of existing pipelines designed and built under those Standards superseded by this Standard, where such pipelines are modified to operate under the conditions within the scope of this Standard.
- (b) Operating authorities, which operate and maintain pipelines that are not designed and constructed in accordance with AS 2885.1, and where it is not feasible to physically modify the pipeline, may apply this Standard provided the areas of non-compliance with AS 2885.1 are documented and are subject to risk assessment. Any actions required to mitigate risk shall be approved in the safety and operating plan.