

# Gas Supply (Network Safety Management) Regulation 2002

under the

Gas Supply Act 1996

Her Excellency the Governor, with the advice of the Executive Council, has made the following Regulation under the *Gas Supply Act 1996*.

KIM YEADON, M.P.,

Minister for Energy

# **Explanatory note**

The aim of this Regulation is to provide for the safe operation of gas networks by network operators under the *Gas Supply Act 1996*. This Regulation incorporates (with some modifications) all of the provisions of the *Gas Supply (Safety and Operating Plans) Regulation 1997*, and certain provisions of the *Gas Supply (General) Regulation 1997*. The former of those regulations is repealed on 1 September 2002 under section 10 (2) of the *Subordinate Legislation Act 1989*. This Regulation also contains new provisions relating to the safe operation of gas networks by network operators.

This Regulation provides for the following matters:

- (a) network safety (Part 2), including provisions with respect to the safe supply of gas, the provision of emergency services and the carrying out of gasfitting work, in relation only to connections to, and disconnections from, gas networks,
- (b) safety and operating plans (Part 3 and Schedule 1), including provisions with respect to the lodgment and implementation, form and content, review, audit, availability and amendment of safety and operating plans, and the measures for ensuring compliance with them,
- (c) natural gas standards (Part 4 and Schedule 2),

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Explanatory note

- (d) reports to be prepared by a network operator in relation to a gas network (Part 5).
- (e) other matters of a minor, consequential or ancillary nature (Parts 1 and 6).

#### This Regulation refers to:

- (a) the code issued by the Australian Gas Association under the title AG 603–1978, *Gas Distribution Code*, and
- (b) the following Australian Standards published by Standards Australia:
  - (i) AS/NZS 1596: 2002, The storage and handling of LP Gas,
  - (ii) AS 1697—1981, Gas transmission and distribution systems (known as the SAA Gas Pipeline Code),
  - (iii) AS 2885.1—1997, Pipelines—Gas and liquid petroleum, Part 1: Design and construction,
  - (iv) AS 2885.2—1995, Pipelines—Gas and liquid petroleum, Part 2: Welding,
  - (v) AS 2885.3—2001, Pipelines—Gas and liquid petroleum, Part 3: *Operation and maintenance*,
  - (vi) AS 3723—1989, Installation and maintenance of plastics pipe systems for gas,
  - (vii) AS 3814—2002/AG 501—2002, Industrial and commercial gas-fired appliances,
  - (viii) AS 5601—2002/AG 601—2002, Gas installations, and
- (c) a scheme conducted by the Australian Gas Association or the Australian Liquefied Petroleum Gas Association for the certification of gas appliances.

This Regulation is made under the *Gas Supply Act 1996*, including section 83 (the general regulation-making power).

This Regulation is made in connection with the staged repeal of subordinate legislation under the *Subordinate Legislation Act 1989*.

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Preliminary Part 1

# Gas Supply (Network Safety Management) Regulation 2002

## Part 1 Preliminary

#### 1 Name of Regulation

This Regulation is the Gas Supply (Network Safety Management) Regulation 2002.

#### 2 Commencement

This Regulation commences on 1 September 2002.

**Note.** This Regulation incorporates (with some modifications) all of the provisions of the *Gas Supply (Safety and Operating Plans) Regulation 1997*, and certain provisions of the *Gas Supply (General) Regulation 1997*. The former of those regulations is repealed on 1 September 2002 under section 10 (2) of the *Subordinate Legislation Act 1989*.

#### 3 Definitions

In this Regulation:

AG 603 means the code issued by the Australian Gas Association under the title AG 603—1978, Gas Distribution Code, as in force for the time being.

AS/NZS 1596 means the Australian Standard entitled AS/NZS 1596: 2002, *The storage and handling of LP Gas*, published by Standards Australia, as in force for the time being.

AS 1697 means the Australian Standard entitled AS 1697—1981, Gas transmission and distribution systems (known as the SAA Gas Pipeline Code), published by Standards Australia, as in force for the time being.

**AS 2885** means the Australian Standards entitled as follows, published by Standards Australia, as in force for the time being:

- (a) AS 2885.1—1997, Pipelines—Gas and liquid petroleum, Part 1: Design and construction,
- (b) AS 2885.2—1995, Pipelines—Gas and liquid petroleum, Part 2: Welding,

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(c) AS 2885.3—2001, *Pipelines—Gas and liquid petroleum*, Part 3: *Operation and maintenance*.

AS 3723 means the Australian Standard entitled AS 3723—1989, *Installation and maintenance of plastics pipe systems for gas*, published by Standards Australia, as in force for the time being.

AS 3814 means the Australian Standard entitled AS 3814—2002/AG 501—2002, *Industrial and commercial gas-fired appliances*, published by Standards Australia, as in force for the time being.

AS 5601 means the Australian Standard entitled AS 5601—2002/AG 601—2002, *Gas installations*, published by Standards Australia, as in force for the time being.

*audit certificate* means a certificate issued by a nominated auditor in accordance with clause 12 or 13.

*Director-General* means the Director-General of the Ministry of Energy and Utilities.

*gasfitting rules* means gasfitting rules established by the network operator in accordance with clause 12 of Schedule 1.

gas network means a distribution pipeline or a distribution system.

*hazardous event* means an event that causes, or has the potential to cause, physical injury to, or damage to the health of, a person or damage to property or the environment.

**nominated auditor**, in relation to a network operator's safety and operating plan, means a person who is, for the time being, a person nominated by the network operator under clause 11 in respect of the plan.

safety and operating plan means a safety and operating plan referred to in clause 8 (1).

*the Act* means the *Gas Supply Act 1996*.

(1) The notes in this Regulation do not form part of this Regulation.

Network safety Part 2

# Part 2 Network safety

#### 4 Network operators to ensure safe gas supply

- (1) A network operator must develop, maintain and operate a safe gas network.
- (2) A network operator is to ensure that matters concerning the design, construction or operation of, or extension to, a gas network are carried out in accordance with:
  - (a) the requirements of AS/NZS 1596, AS 2885, AS 1697, AS 3723 and AG 603 (as appropriate), or
  - (b) the requirements of other standards (as appropriate) identified in the safety and operating plan that are no less stringent than the standards referred to in paragraph (a).

Maximum penalty: 100 penalty units (in the case of a corporation) and 25 penalty units (in any other case).

#### 5 Emergency services

- (1) A network operator must:
  - (a) provide the public with an emergency telephone number, accessible 24 hours a day every day, for reporting any escape of gas from the operator's gas network or from premises directly connected to the network, and
  - (b) provide the public with a means of making such reports in person, during normal business hours, at the network operator's business premises, and
  - (c) provide an effective system for receiving and dealing with such reports, and
  - (d) cause every such report to be promptly acted on, and ensure that, as far as possible, everything is done that needs to be done to stop the escape of, and to disperse, any gas that is at risk of igniting or exploding, or that risks suffocating or otherwise harming any person, and
  - (e) ensure that adequate publicity is given of the ways in which the network operator can be contacted for the purpose of reporting any escape of gas, and

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- (f) make available to any person on request the details of the network operator's emergency services.
- (2) The details of a network operator's emergency services referred to in subclause (1) (f) must include a statement:
  - (a) to the effect that the operator will make safe any escape of gas from its gas network, and from that part of a gas installation directly connected to its gas network up to and including the gas meter outlet, and
  - (b) of the circumstances in which a gas user may be liable for the cost of repairs associated with a gas escape.

Maximum penalty: 100 penalty units (in the case of a corporation) and 25 penalty units (in any other case).

#### 6 Gasfitting work with respect to gas networks

- (1) This clause applies to the following kinds of gasfitting work:
  - (a) the connection of a gas installation to a gas network, or
  - (b) the disconnection of a gas installation from a gas network, or
  - (c) any other gasfitting work in relation to the connection of a gas installation to, or the disconnection of a gas installation from, a gas network.
- (2) A person must not carry out gasfitting work to which this clause applies otherwise than in accordance with:
  - (a) in the case of all gasfitting work, AS 5601, and
  - (b) in the case of gasfitting work involving liquefied petroleum gas, AS/NZS 1596.

Maximum penalty: 100 penalty units (in the case of a corporation) and 25 penalty units (in any other case).

(3) A person who carries out gasfitting work to which this clause applies on behalf of a network operator is exempt from the requirements of subclause (2) if instead the person complies with the requirements of the network operator's gasfitting rules.

Network safety Part 2

#### 7 Refusal or discontinuance of supply

- (1) A network operator may refuse or discontinue the supply of gas to a person if, in the opinion of the operator:
  - (a) the supply or continued supply of gas is dangerous to life, health or property, or
  - (b) the person's gas installation, or any gas appliance connected to it, is not installed in accordance with any relevant gasfitting rules, or AS 5601, AS 3814 or AS/NZS 1596 (whichever is appropriate).
- (2) A network operator may discontinue a supply of gas to a person:
  - (a) by disconnecting the person's gas installation from its gas network, or
  - (b) by disconnecting any gas appliances from the person's gas installation, or
  - (c) by otherwise rendering the person's gas installation or any such gas appliances inoperable.
- (3) A network operator that refuses or discontinues the supply of gas to a person under this clause must cause written notice of the reasons for the refusal or discontinuance of supply to be given:
  - (a) to the person and any relevant supplier, and
  - (b) in the case of a discontinuance of supply of gas to premises, to the Director-General.

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Part 3 Safety and operating plans

# Part 3 Safety and operating plans

#### 8 Network operators to lodge and implement safety and operating plans

- (1) A network operator must:
  - (a) lodge with the Director-General a safety and operating plan for its gas network that complies with the requirements of this Regulation, and
  - (b) implement that plan.

Maximum penalty: 100 penalty units (in the case of a corporation) and 25 penalty units (in any other case).

- (2) The safety and operating plan must be lodged:
  - (a) within 6 months from the date of the grant of the authorisation or licence to operate the gas network to which the plan relates, or
  - (b) within such further period as may be approved by the Director-General in writing.
- (3) The safety and operating plan:
  - (a) must be in writing (but may include diagrams), and
  - (b) must be approved of in writing by an officer of the network operator who is competent, and specifically authorised by the network operator, to do so.
- (4) A network operator must not construct, alter, extend, maintain, repair or operate a gas network except in accordance with:
  - (a) a safety and operating plan, or
  - (b) a draft safety and operating plan (being a plan that complies with the requirements of this Regulation relating to the form and content, and review and availability, of safety and operating plans but which has not yet been audited in accordance with clause 12) that has been lodged with the Director-General.
- (5) Nothing in subclause (4) affects the requirement made by subclause (2).
- (6) The Director-General has the same powers under this Part in relation to a draft safety and operating plan as the Director-General has in relation to a safety and operating plan.

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#### 9 Network operators to review safety and operating plans

- (1) The network operator is to review and, if necessary, revise the safety and operating plan:
  - (a) as soon as practicable after any significant change (including significant incremental change) occurs in relation to the operation or maintenance of the gas network, and
  - (b) in any case, at least once every 2 years (starting from the date of lodgment of the safety and operating plan under clause 8).

Maximum penalty: 100 penalty units (in the case of a corporation) and 25 penalty units (in any other case).

- (2) For the purposes of subclause (1) (a), significant change includes (but is not limited to):
  - (a) any upgrade or modification in the engineering design of the gas network, and
  - (b) any other change in the risks to be managed by the network operator in relation to the gas network or in relation to the measures to be taken to manage such risks.

#### 10 Matters to be included in safety and operating plans

- (1) The object of a safety and operating plan is to ensure the safe operation of the gas network to which it relates, having regard to a range of matters including gas quality, operating personnel, plant, equipment, the community and the environment.
- (2) A safety and operating plan must include (but is not limited to) the following matters in relation to each distribution district of the network operator:
  - (a) a description of the gas network operation and an outline of operating and maintenance procedures,
  - (b) an analysis of hazardous events that might be expected to occur,
  - (c) the procedures to be implemented in case of emergencies,
  - (d) the gas quality standards to be applied and the procedures to be implemented to ensure that the gas conveyed or supplied meets those standards,
  - (e) specification of the plan's objectives and of appropriate performance indicators developed by the network operator.

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(3) If the Director-General so approves in writing, any matter that under this Regulation is to be included in a safety and operating plan in relation to each distribution district of a network operator may instead be included in relation to distribution districts of the network operator as a group.

(4) A safety and operating plan must comply with Schedule 1.

Maximum penalty: 100 penalty units (in the case of a corporation) and 25 penalty units (in any other case).

#### 11 Nomination of persons to audit safety and operating plans

(1) A network operator must give the Director-General a nomination in writing of a person as an auditor of its safety and operating plan at least one month before the person is first required to give a certificate in relation to the plan under this Part.

Maximum penalty: 100 penalty units (in the case of a corporation) and 25 penalty units (in any other case).

- (2) A person may not be nominated as an auditor under this clause unless the person is:
  - (a) independent of the network operator, and
  - (b) competent to exercise the functions of an auditor under this Regulation in respect of the network operator's safety and operating plan.
- (3) If the Director-General advises a network operator in writing that a nomination is not accepted or is no longer acceptable, the nomination ceases to have effect for the purposes of this Regulation.

#### 12 Initial audit of safety and operating plans

- (1) A safety and operating plan must, when lodged, be accompanied by a report on the plan from a nominated auditor that includes a certificate by the auditor that:
  - (a) the plan complies with this Regulation, and
  - (b) the plan is appropriate having regard to the size and complexity of the gas network (subject to any exemptions granted by the Director-General), and

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- (c) all measures intended to prevent hazardous events identified in the plan from occurring, and intended to protect operating personnel, plant, equipment, the community and the environment should they occur, are in place, and
- (d) there are properly trained and equipped personnel available to implement the plan.
- (2) The Director-General may, before the expiration of the period within which a safety and operating plan must be lodged by a network operator under clause 8, extend that period by notice in writing if the network operator provides the Director-General with a report from a nominated auditor indicating:
  - (a) an audit has been carried out, and
  - (b) any failure to comply with subclause (1) (a), (b), (c) or (d), and
  - (c) the measures that the network operator proposes to take to rectify any such non-compliance, and
  - (d) the time within which the network operator has undertaken to rectify any such non-compliance.

#### 13 Periodical audits of safety and operating plans

- (1) A network operator must lodge with the Director-General in respect of its safety and operating plan a report on the plan from a nominated auditor that complies with subclause (2):
  - (a) within the period of 28 days after each anniversary of the date of lodgment of the safety and operating plan under clause 8, or
  - (b) within such other periods, of a lesser frequency, as the Director-General approves in writing in relation to the particular network operator.

Maximum penalty: 100 penalty units (in the case of a corporation) and 25 penalty units (in any other case).

- (2) The report must include a certificate by the nominated auditor that:
  - (a) the safety and operating plan complies with Schedule 1, and
  - (b) the measures implemented to prevent hazardous events identified in the plan from occurring, and intended to protect operating personnel, plant, equipment, the community and the environment should they occur, are being maintained, and
  - (c) there are properly trained and equipped personnel available to maintain the plan, and

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- (d) the plan is adequate and appropriate having regard to any changes in the gas network since the previous audit certificate was issued, and
- (e) any measures to rectify non-compliance with the plan detected in any previous audit have been undertaken and are effective.
- (3) The Director-General may, before the expiration of a period within which a certificate must be lodged by a network operator under subclause (1), extend that period by notice in writing if the network operator provides the Director-General with a report from a nominated auditor indicating:
  - (a) an audit has been carried out, and
  - (b) any failure to comply with the safety and operating plan, and
  - (c) the measures that the network operator proposes to take to rectify any such non-compliance, and
  - (d) the time within which the network operator has undertaken to rectify any such non-compliance.

#### 14 Additional audits may be required

- (1) The Director-General may, by notice in writing to a network operator, require the network operator to carry out, or to provide such assistance and co-operation as is reasonable for the purposes of carrying out, a further audit of its safety and operating plan.
- (2) Such a requirement may be made if:
  - (a) the Director-General is satisfied that the further audit is required in order to verify that the safety and operating plan is being properly implemented, or
  - (b) the Director-General is not satisfied as to any aspect of an audit carried out by an auditor nominated by a network operator.
- (3) The Director-General may require such a further audit to be carried out by an auditor nominated or appointed by the Director-General.
- (4) The audit may relate to any or all of the matters to which an initial audit under clause 12 or a periodical audit under clause 13 may relate.
- (5) A network operator must comply, as soon as practicable, with a requirement made by the Director-General under this clause.
  - Maximum penalty: 100 penalty units (in the case of a corporation) and 25 penalty units (in any other case).

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#### 15 Availability of safety and operating plans

- (1) A network operator:
  - (a) must cause the following to be kept at its principal office and to be made available to the Director-General:
    - (i) a complete and up-to-date copy of its safety and operating plan, and
    - (ii) details of any incremental change (other than that requiring the plan to be revised under clause 9) that has occurred in relation to the operation or maintenance of the gas network and that is not yet reflected in the plan, and
  - (b) must cause the following to be made available to persons likely to be involved in the implementation of the plan:
    - (i) complete and up-to-date copies of the provisions of the plan that relate to safety, and
    - (ii) details of any incremental change (as referred to in paragraph (a) (ii)) but only to the extent that such change relates to safety.

Maximum penalty: 100 penalty units (in the case of a corporation) and 25 penalty units (in any other case).

(2) In subclause (1), a reference to a complete and up-to-date copy of a safety and operating plan (or the provisions of a safety and operating plan) is a reference to a complete copy of the most recent version of the plan (or the relevant provisions) including any revisions required to be made under clause 9 and any amendments required to be made under clause 16.

#### 16 Director-General may direct amendment of safety and operating plans

- (1) If the Director-General is of the opinion:
  - (a) that a network operator's safety and operating plan will not produce a safe outcome, or
  - (b) that its implementation has given rise to, or will give rise to, an unsafe situation.

the Director-General may, by order in writing, direct the network operator to amend the plan in such manner, and within such period of time, as is specified in the order.

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(2) A network operator must, as soon as practicable, comply with any direction under this clause and must furnish a copy of the amended safety and operating plan to the Director-General within 7 days after complying with the direction.

Maximum penalty: 100 penalty units (in the case of a corporation) and 25 penalty units (in any other case).

#### 17 Director-General may direct compliance with safety and operating plans

- (1) If the Director-General is of the opinion that a network operator is not:
  - (a) complying with the requirements of its safety and operating plan or any codes, standards or specifications set out or referred to in that plan, or
  - (b) following any procedures set out or referred to in that plan,
  - the Director-General may, by order in writing, direct the network operator to take such action as is specified in the order to comply with those requirements, codes, standards or specifications or to follow those procedures.
- (2) A network operator must, as soon as practicable, comply with any direction under this clause.

Maximum penalty: 100 penalty units (in the case of a corporation) and 25 penalty units (in any other case).

#### 18 Exemptions

- (1) The Director-General may, by notice in writing, exempt a network operator from any requirement as to the content of a safety and operating plan if the Director-General is of the opinion that the requirement is inappropriate having regard to the size or complexity of its gas network.
- (2) An exemption under this clause may be given unconditionally or subject to conditions.
- (3) The Director-General may, by further notice in writing, vary or revoke any such exemption.

Natural gas standards

Part 4

## Part 4 Natural gas standards

#### 19 Definitions

In this Part:

*compliant natural gas* means natural gas that complies with the standards set out in Schedule 2.

*non-compliant natural gas* means natural gas that is not compliant natural gas.

reticulator means an authorised reticulator.

supplier means an authorised supplier.

*testing agency* means a reticulator or other person who tests natural gas for the purpose of compliance by the reticulator with clause 23.

#### 20 Natural gas in pipelines to comply with standards

- (1) A reticulator must not convey non-compliant natural gas through a distribution pipeline.
- (2) A supplier must not supply non-compliant natural gas to an end user customer through a distribution pipeline.
- (3) A person must not inject non-compliant natural gas, or cause such gas to be injected, into a distribution pipeline.

Maximum penalty: 100 penalty units (in the case of a corporation) and 25 penalty units (in any other case).

#### 21 Exception from natural gas standards in special cases

- (1) A reticulator does not commit an offence under clause 20 (1) by conveying non-compliant natural gas through a distribution pipeline if the gas is conveyed in accordance with this clause.
- (2) Non-compliant natural gas is conveyed by a reticulator in accordance with this clause if:
  - (a) the reticulator reasonably believes that the conveyance of the gas is necessary to ensure the safety of the public or the security of the reticulator's distribution pipeline, or
  - (b) the reticulator reasonably believes that the gas that is, or is to be, delivered to the end user customer is compliant natural gas.

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- (3) A reticulator conveying non-compliant natural gas in accordance with this clause must notify the Director-General of the point of injection of the non-compliant natural gas:
  - (a) by telephone, facsimile or email as soon as practicable after the time when the non-compliant natural gas began to be conveyed in the reticulator's distribution pipeline, and
  - (b) in writing within 14 days after that time.

Maximum penalty: 100 penalty units (in the case of a corporation) and 25 penalty units (in any other case).

# 22 Reticulator may obtain information and documents regarding natural gas standards

- (1) If a reticulator has reason to believe that a person has information or a document that may assist the reticulator in determining whether natural gas being injected into, or conveyed through, the reticulator's distribution pipeline is compliant natural gas, the reticulator may by notice in writing served on the person require the person to give the reticulator the information or a copy of the document.
- (2) The notice must:
  - (a) identify the type of information or document that is being sought, and
  - (b) specify:
    - (i) a reasonable time by which the requirement must be complied with, and
    - (ii) the form in which the information or copy of the document is to be given to the reticulator, and
  - (c) state that the requirement is made under this clause.
- (3) A person must not, in purported compliance with a requirement under this clause, give a reticulator information that the person knows, or ought to know, is false or misleading.
- (4) A person must not, without reasonable excuse, fail to comply with any requirement under this clause.

Maximum penalty: 100 penalty units (in the case of a corporation) and 25 penalty units (in any other case).

Natural gas standards

Part 4

#### 23 Testing of natural gas

(1) A reticulator must not convey natural gas through a distribution pipeline unless the reticulator has tested the gas, or caused the gas to be tested, in accordance with the reticulator's safety and operating plan, to ascertain whether the gas is compliant natural gas.

**Note.** If the reticulator does not itself test the gas, the person actually testing the gas is referred to in this Part as the *testing agency*. See clause19.

- (2) A testing agency must keep a register at the agency's main office containing copies of all test results.
- (3) If a test has been made to determine a derived value (such as a Wobbe index value), the test results required to be kept in the register include the raw measurements used to determine that derived value.
- (4) The testing agency must ensure that the register of test results is open for public inspection during ordinary business hours, and copies of or extracts from the register are to be made available:
  - (a) to the Director-General—on request and at no cost, and
  - (b) to any other person—on request and on payment of a reasonable fee fixed by the testing agency.
- (5) A testing agency must maintain all testing equipment used to test natural gas, or cause that testing equipment to be maintained, in accordance with the reticulator's safety and operating plan.

Maximum penalty: 100 penalty units (in the case of a corporation) and 25 penalty units (in any other case).

#### 24 Testing agencies and suppliers to report non-compliant natural gas

- (1) A testing agency must notify the Director-General without delay if the testing agency becomes aware of any test result that shows that natural gas in a reticulator's distribution pipeline is non-compliant.
- (2) A supplier who knows or becomes aware that any non-compliant natural gas is being, or is to be, conveyed through a reticulator's distribution pipeline must notify the Director-General without delay.
- (3) Notice under this clause may be given by telephone, facsimile or email.
- (4) A testing agency or supplier who gives notice of any matter under this clause by telephone must, within 7 days after doing so, send written notice of that matter to the Director-General.

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(5) A testing agency or supplier must not send to the Director-General a copy of, or notice of, any test result that the testing agency or supplier knows, or ought to know, is false or misleading.

Maximum penalty: 100 penalty units (in the case of a corporation) and 25 penalty units (in any other case).

# 25 Director-General may obtain information regarding non-compliant natural gas

- (1) If the Director-General believes that non-compliant natural gas is being, or is to be, injected into or conveyed through a reticulator's distribution pipeline, the Director-General may by notice in writing served on any person require that person to give the Director-General such information regarding the injection or conveyance of the non-compliant natural gas as the Director-General specifies.
- (2) The notice must:
  - (a) specify:
    - (i) a reasonable time by which the requirement must be complied with, and
    - (ii) the form in which the information is to be given to the Director-General, and
  - (b) state that the requirement is made under this clause.
- (3) A person must not, in purported compliance with a requirement made by a notice under this clause, give the Director-General information that the person knows, or ought to know, is false or misleading.
- (4) A person must not, without reasonable excuse, fail to comply with any requirement made by a notice issued by the Director-General under this clause.

Maximum penalty: 100 penalty units (in the case of a corporation) and 25 penalty units (in any other case).

# 26 Director-General may issue directions and take other measures regarding non-compliant natural gas

(1) If the Director-General believes that non-compliant natural gas is being, or is to be, injected into or conveyed through a reticulator's distribution pipeline, the Director-General may issue directions to a reticulator or supplier regarding the injection or conveyance of the non-compliant natural gas.

Natural gas standards

Part 4

- (2) Without limiting subclause (1), the directions issued by the Director-General in accordance with this clause may require a reticulator or supplier to notify end user customers who may be supplied with the non-compliant natural gas that such gas is being, or is to be, injected into or conveyed through the distribution pipeline concerned.
- (3) A person must not, without reasonable excuse, fail to comply with any direction issued by the Director-General under this clause.

Maximum penalty: 100 penalty units (in the case of a corporation) and 25 penalty units (in any other case).

#### 27 Natural gas must have odour

A reticulator must ensure that natural gas being conveyed, or to be conveyed, through the reticulator's distribution pipeline has a distinctive and unpleasant odour that is discernible at a level specified in the reticulator's safety and operating plan.

Maximum penalty: 100 penalty units (in the case of a corporation) and 25 penalty units (in any other case).

#### 28 Exemptions

- (1) The Director-General may, by notice in writing, exempt a reticulator from any or all of the requirements of this Part.
- (2) The Director-General may, by a further notice in writing, revoke any such exemption.
- (3) If the Director-General grants an exemption to a reticulator under this clause, the Director-General may issue directions to the reticulator regarding the conveyance of natural gas through the reticulator's distribution pipeline.
- (4) A person must not, without reasonable excuse, fail to comply with any direction issued by the Director-General under subclause (3).

Maximum penalty: 100 penalty units (in the case of a corporation) and 25 penalty units (in any other case).

Clause 29 Gas Supply (Network Safety Management) Regulation 2002

Part 5 Reporting

### Part 5 Reporting

#### 29 Reports to the Director-General

(1) A safety and operating plan must include a schedule of reports to be made to the Director-General in relation to the maintenance and safety aspects of the operation of the gas network.

- (2) If the Director-General directs that the schedule should provide for:
  - (a) reports in respect of particular maintenance or safety aspects of the operation of the gas network, or
  - (b) all or any of the reports referred to in subclause (3),

the network operator must comply with that direction.

- (3) The Director-General may direct a network operator to prepare reports, and the network operator must comply with any such direction, in relation to all or any of the following matters:
  - (a) gas network assets (for example, reports concerning the total length of the gas network, or descriptions of the gas network),
  - (b) the safety and integrity of the gas network (for example, reports on the number of incidents of mechanical damage occurring in network operations, or the number of emergency exercises conducted),
  - (c) the reliability of the gas network and consumer-related matters (for example, reports concerning incidents of poor pressure supply, deviations from gas quality specifications, or the number of meters and pressure regulators installed or replaced),
  - (d) any matter relating to high-pressure gas operations, that is, gas operations involving pressure exceeding 1050 kilopascals (for example, reports concerning corrosion inspections, or third-party activities impacting on high-pressure gas operations),
  - (e) any matters which, under this Regulation or the safety and operating plan, require immediate reporting (for example, reports concerning the reporting of emergencies, accidents, non-compliant gas, or any other incident that the plan requires to be reported as soon as practicable after the incident occurs).

Maximum penalty: 100 penalty units (in the case of a corporation) and 25 penalty units (in any other case).

Miscellaneous Part 6

#### Part 6 Miscellaneous

#### 30 Delegations

The Director-General may delegate to any person the exercise of all or any of the Director-General's functions (other than this power of delegation) under this Regulation.

#### 31 Amendment of Gas Supply (General) Regulation 1997

The Gas Supply (General) Regulation 1997 is amended:

- (a) by omitting the definition of *gasfitting rules* from clause 3, and
- (b) by inserting "(not being gasfitting work referred to in clause 6 (1) of the *Gas Supply (Network Safety Management) Regulation* 2002)" before "otherwise" in clause 7 (1), and
- (c) by omitting "any relevant gasfitting rules or (if no gasfitting rules apply to the work) in accordance with" from clause 7 (1), and
- (d) by omitting clauses 23 and 24, Part 6 and Schedule 1.

#### 32 Savings provisions

- (1) Any act, matter or thing that before the repeal of the *Gas Supply (Safety and Operating Plans) Regulation 1997* (effected by section 10 (2) of the *Subordinate Legislation Act 1989*) had effect under that Regulation continues to have effect under this Regulation, but only to the extent that it is not inconsistent with this Regulation and the acts, matters or things done under this Regulation.
- (2) Any act, matter or thing that before the amendment of the *Gas Supply* (*General*) Regulation 1997 (effected by clause 31 of this Regulation) had effect under that Regulation continues to have effect under this Regulation, but only to the extent that it relates to this Regulation and is not inconsistent with this Regulation and the acts, matters or things done under this Regulation.

Safety and operating plans

## Schedule 1 Safety and operating plans

(Clause 10 (4))

#### 1 General provisions of safety and operating plan

The general matters that must be included in a safety and operating plan are as follows:

- (a) a statement that sets out the objectives of the plan,
- (b) a description of the management structure of the network operator and a schedule identifying each person designated by the network operator as being responsible for the development, approval and implementation of the plan,
- (c) identification of the distribution districts to which the plan applies and of those procedures set out or referred to in the plan that apply only in relation to a particular distribution district,
- (d) a description of the gas network within each distribution district, and of its operation and maintenance,
- (e) a statement to the effect that all procedures set out or referred to in the plan are in place and have been tested and proved,
- (f) if the plan sets out requirements relating to high-pressure gas operations (that is, gas operations involving pressure exceeding 1050 kilopascals), a statement to the effect that such requirements are consistent with the requirements of AS 2885.

#### 2 Description of gas network

A description of a gas network, and its operation and maintenance, within each distribution district of the network operator must include all of the following:

- (a) the range of supply pressures applied within each distribution district,
- (b) references to maps showing the location of the gas works of each distribution district and the procedures for gaining access to those maps,
- (c) a description of the gas works within each distribution district,

(d) a description of the engineering records that the network operator maintains, the location of those records, and the procedures for maintaining, filing and gaining access to those records.

#### 3 Analysis of hazardous events

- (1) An analysis of hazardous events must be prepared in relation to each distribution district of the network operator unless subclause (2) applies.
- (2) A common analysis of hazardous events may be prepared in relation to those distribution districts of the network operator that possess the same characteristics from which the risk of hazardous events may be identified.
- (3) If a new gas network is to be constructed or an existing gas network extended, an analysis of hazardous events must be prepared in relation to the construction or extension before its construction is commenced.
- (4) An analysis of hazardous events must, consistent with the size and complexity of each distribution district or proposed distribution district, concerned:
  - (a) identify the range of supply pressures applied within each distribution district (or to be applied within each proposed distribution district, as the case may be), and
  - (b) systematically identify hazardous events that might be expected to occur, and
  - (c) identify the potential causes of those events, and
  - (d) identify the possible consequences of those events, and
  - (e) specify operational, maintenance and organisational measures intended to prevent those events from occurring or, should they occur, intended to protect operating personnel, plant, equipment, the community and the environment.
- (5) The operational and maintenance measures must include a maintenance schedule indicating, among other things, the type and frequency of inspections, coating surveys and checks on cathodic protection devices (if such coatings or devices are used).
- (6) In the case of new gas networks or extensions to existing networks, an analysis of hazardous events should also take into account hazardous events that may occur during construction.

- (7) A safety and operating plan must include a description of the methodology to be used to conduct an analysis of hazardous events.
- (8) An analysis of hazardous events in relation to any section of a distribution district that may operate at pressures exceeding 1050 kilopascals must comply with the requirements for risk assessment provided for in AS 2885.

#### 4 Emergencies

- (1) A safety and operating plan is to identify the emergency procedures to be implemented by the network operator to ensure an effective response to emergencies.
- (2) The types of emergencies in respect of which procedures must be implemented include (as a minimum):
  - (a) fires, explosions, leaks and impacts (with particular reference to those caused by the activities of other parties), and
  - (b) natural disasters, and
  - (c) civil disturbances.
- (3) A safety and operating plan must identify the procedures implemented by the network operator that ensure:
  - (a) all emergency procedures have been tested and proved, and
  - (b) all emergency procedures are reviewed and tested on a regular basis.

#### 5 Gas quality

The gas quality standards to be applied must include standards relating to the following:

- (a) heating value,
- (b) relative density,
- (c) composition and purity.

#### 6 Procedures for ensuring that gas is malodorous

A safety and operating plan must:

- (a) identify the procedures to be implemented by the network operator to ensure that gas conveyed or supplied has a distinctive and unpleasant odour, and
- (b) specify the odoriferous substances to be used, and

(c) specify the odour intensities.

#### 7 Procedures for testing gas

- (1) A safety and operating plan must identify the procedures to be implemented by the network operator to ensure that gas conveyed or supplied:
  - (a) meets the relevant gas quality and pressure standards, and
  - (b) complies with the relevant gas specification.
- (2) A safety and operating plan must specify:
  - (a) the equipment to be provided and maintained by or on behalf of the network operator for the testing of gas (including the order of accuracy of results the equipment delivers), and
  - (b) the place or places at which the equipment is to be kept, and
  - (c) how often calibration tests are to be conducted on the equipment to ensure its accuracy, and
  - (d) how often gas testing is to be carried out.

#### 8 Procedures for approving Type B appliances

- (1) A network operator must include in its safety and operating plan procedures for approving:
  - (a) Type B appliances, and
  - (b) gas installations that are designed under standards other than AS 5601.
- (2) The procedures referred to in subclause (1) must be no less stringent than:
  - (a) AS 3814, or
  - (b) if that standard is not applicable to the appliance or installation, such other code or standard as the Director-General determines to be appropriate in the circumstances.
- (3) In this clause, *Type B appliances* means gas appliances other than those that are required to be certified under a scheme conducted by the Australian Gas Association or the Australian Liquefied Petroleum Gas Association for the certification of appliances.

Safety and operating plans

#### 9 Plan must incorporate any relevant management system standards

A safety and operating plan is to incorporate any management system standards that are relevant to the management of a gas network (for example, standards relating to document control, record management, and procedures for conducting audits and management reviews).

#### 10 Codes and standards

A safety and operating plan must specify the codes and standards that the network operator intends to follow in the design, installation, operation and maintenance of the gas network, and the year of publication of those codes and standards.

#### 11 Meters, regulators and other basic metering equipment

- (1) A safety and operating plan must require any device or equipment used in the gas network (including any basic metering equipment):
  - (a) to be suitable for the design working pressure of the part or parts of the network in which it is used, and
  - (b) if installed, to be installed so as not to interfere with metering accuracy.
- (2) A safety and operating plan must require pressure regulators operating with an outlet pressure of more than 35 kilopascals and any compensating devices to be sealed.
- (3) In this clause, *basic metering equipment* means a gas meter and any one or more of the following used in conjunction with gas meters:
  - (a) valves to isolate gas supply,
  - (b) pipework (including a combination of pipes, flanges, tees, elbows and other pipe-connecting equipment designed to convey gas),
  - (c) fittings, smaller instruments used in connection with fittings, pressure sensing tubing and tube fittings, instrument valves and associated equipment,
  - (d) filters (being devices designed to trap and remove foreign matter from gas streams),
  - (e) pressure regulators (being devices designed to reduce and control pressure),

- (f) over-pressure protection devices (being devices designed to protect downstream equipment from exposure to excessive pressure if upstream equipment fails),
- (g) non-return valves (being devices designed to ensure that gas flow travels in one direction and to prevent reverse flow),
- (h) mechanical indexes (being devices designed to indicate consumption of raw metered gas),
- (i) meter bars and other equipment designed to support a gas meter, and associated equipment that forms part of the meter installation,
- (j) electrical connections and wiring designed to convey electrical signals for gas meters, flow correction devices, alarms and metering communications equipment,
- (k) flow correction devices or software designed to enable raw metering data to be adjusted for the effects of temperature, pressure and gas quality (or any of these) and to be referenced to standard pressure and temperature conditions,
- (l) temperature and pressure correction devices or software designed to enable raw metering data to be adjusted for the effects of temperature and pressure,
- (m) devices and equipment designed to analyse and calculate the heating value of a gas stream (for example, chromatography equipment and calorimeters).

#### 12 Gasfitting rules

- A safety and operating plan must establish rules concerning the manner in which any work involved in the connection of a gas installation to, or the disconnection of a gas installation from, the network operator's gas network is to be carried out.
- (2) Any rules so established must be no less stringent than any code of practice or standard that is applied to any such work by any regulations under the Act.
- (3) A safety and operating plan must include a statement to the effect that any gasfitting work involved in the connection of a gas installation to, or the disconnection of a gas installation from, its gas network must be carried out by, or under the supervision of, suitably qualified gasfitters.

Gas Supply (Network Safety Management) Regulation 2002

Schedule 1 Safety and operating plans

#### 13 Identification of ownership of pipes

A safety and operating plan must identify procedures to be implemented by the network operator to ensure that the network operator can identify its pipes as such if necessary (for example, in the case of an emergency).

Natural gas standards Schedule 2

# Schedule 2 Natural gas standards

(Clause 19)

1 Natural gas is to comply with the following specification limits:

Specification		Limit
Wobbe Index	minimum	$46.0 \text{ MJ/m}^3$
	maximum	52.0 MJ/m <sup>3</sup>
Oxygen	maximum	0.2 mol %
Hydrogen sulphide	maximum	$5.7 \text{ mg/m}^3$
Total sulphur	maximum	$50.0 \text{ mg/m}^3$
Water content	maximum	Dew point $0^{\circ}\text{C}$ at maximum transmission pressure (In any case, no more than 112.0 mg/m³)
Hydrocarbon dew point	maximum	2.0°C 3500 kPa
Total inert gases	maximum	7.0 mol %

2 The standard testing conditions for all the gas properties listed above are:

Temperature: 15°C

Absolute pressure: 101.325 kPa

With the natural gas dry (that is, completely free from water vapour).

BY AUTHORITY