



Western Australia

Gas Standards Act 1972

**Gas Standards (Gas Supply and System Safety)
Regulations 2000**

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Gas Standards (Gas Supply and System Safety) Regulations 2000

Contents

Part 1 — Preliminary

1.	Citation	1
2.	Commencement	1
3.	Terms used	1

Part 2 — Standards for gas supplied

Division 1 — General standard for gas pressure

4.	Operating pressure of gas supplied to consumers, undertakers' duties as to	6
----	---	---

Division 2 — Standards for natural gas

5.	Quality of gas supplied to consumers, undertakers' duties as to	7
6.	Odourising natural gas	7

Division 3 — Standards for LPG

7.	Quality of LPG supplied to consumers, undertakers' duties as to	8
9.	Odourising LPG	9
12.	Mixed LPG supplied to consumers, undertakers' duties as to	10
13.	LPG supplied through distribution system, undertakers' duties as to	10

Part 3 — Metering		
14.	Term used: commencement	11
15.	Master meters, operating requirements for	11
16.	Master meters, replacement of	11
17.	Alternative requirements to r. 15 or 16, approval of	12
Part 3A — Entry and commingling of gas of different qualities		
Division 1 — Preliminary		
17A.	Terms used	13
Division 2 — Approved plan		
17B.	When approved plan is required	15
17C.	Management plan for distribution system, content of	16
17D.	Management plan to be submitted for approval	19
17E.	Management plan, approval of etc.	20
17F.	Approved plan, amendment or replacement of	21
17G.	Approved plan, Director may direct to be amended	22
17H.	Approved plan, effect of	23
Division 3 — Determination of heating value of gas		
17I.	HHV zone or zones, network operator's duties to establish etc.	23
17J.	Heating value of gas, network operator's duties to determine etc.	25
Part 4 — Distribution system safety		
Division 1 — Obligations related to the carrying out of prescribed activities		
18.	Prescribed activities, network operator's duties as to	27
20.	Compliance with r. 18, compliance with accepted safety case is evidence of	28
21.	Prescribed activities, duties of people carrying out	28
22.	Major activities, network operator to notify Director of proposed	28
23.	Employees etc., duties of network operator etc. to inform etc.	29

24.	Threats to safety of people or property, network operator's duties to investigate etc.	30
	Division 3 — Safety case provisions	
27.	Safety case, network operator to submit to Director and content of	31
28.	Exemption from s. 27(2)	32
29.	Guidelines to preparation of safety case, Director may issue	32
30.	Nominated auditor, nominating etc.	32
31.	Certification of safety case by nominated auditor	33
32.	Assessment and approval of safety case by Director	34
33.	Certification of approved safety case by nominated auditor	35
34.	Acceptance or rejection of safety case by Director	35
35.	When accepted safety case ceases to have effect; Director to be notified of implementation of safety case	36
36.	Accepted safety case, duration of after implementation	37
37.	Accepted safety case, effect of	37
38.	Accepted safety case, periodical audit of	37
39.	Accepted safety case, amending	38
40.	Director may require accepted safety case to be amended	39
41.	Records about accepted safety case, network operator's duties as to	40
	Division 4 — Notification, investigation and reporting of incidents	
42.	Terms used	40
43.	Which incidents have to be notified to Director	41
44.	Network operator to investigate and report on notifiable incidents	42
45.	Investigation of notifiable incidents by Director	43
46.	Site of notifiable incident not to be disturbed in some cases	43
47.	Gas incidents, reporting requirements for	44

Part 5 — Gas plant safety

48.	Application of Part	45
49.	Safety case, plant operator to submit to Director and content of	45
50.	Exemption from r. 49(1)	45
51.	Guidelines to preparation of safety case, Director may issue	45
52.	Nominated auditor, nominating etc.	45
53.	Certification of safety case by nominated auditor	46
54.	Assessment and acceptance or rejection of safety case by Director	47
55.	Rejected safety case to be modified	47
56.	Assessment and acceptance or rejection of modified safety case	48
57.	Director may determine safety case for gas plant in some cases	48
58.	When accepted safety case has effect	49
59.	Gas plant not to be operated without accepted safety case	49
60.	Accepted safety case, effect of	49
61.	Accepted safety case, periodical audit of	50
62.	Accepted safety case, amending	51
63.	Director may require accepted safety case to be amended	51
64.	Records about accepted safety case, plant operator's duties as to	52

Part 6 — Review of decisions

65.	Terms used	53
66.	Decisions to which this Part applies	53
67.	Review by Director, application for	54
68.	Review panel, Director may convene	54
69.	Procedure on review	54
70.	Costs	55

Schedule 1 — Odorant levels for various gases and types of odorant

Schedule 3 — Requirements for gas plant safety case

Part 1 — Preliminary

- | | | |
|----|--|----|
| 1. | Term used: gas incident | 57 |
| 2. | Performance standards, requirement as to | 57 |

Part 2 — Content of safety case

- | | | |
|----|---|----|
| 3. | Manager etc. of gas plant to be specified | 57 |
| 4. | Person responsible for safety case etc. to be specified | 58 |
| 5. | Plant description, requirements as to | 58 |
| 6. | Formal safety assessment, requirements as to | 58 |
| 7. | Safety management system to be specified | 59 |
| 8. | Gas incidents, procedure for reporting to be specified | 59 |
| 9. | Address where records kept to be specified | 59 |

Part 3 — Content of safety management system

- | | | |
|-----|---|----|
| 10. | Safety policy, requirements as to | 59 |
| 11. | Organisational structure and responsibilities to be specified | 59 |
| 12. | Published technical codes etc. which will apply to be specified | 60 |
| 13. | Means of ensuring adequacy of design, construction etc. | 60 |
| 14. | Control systems which will be used to be specified | 60 |
| 15. | Critical equipment etc. to be specified | 61 |
| 16. | Response plan for emergencies to be specified | 61 |
| 17. | Emergency communications systems to be specified | 61 |
| 18. | Internal monitoring etc. processes etc. to be specified | 62 |

Contents

- | | | |
|-----|---|----|
| 19. | Gas incidents, performance standards for recording etc. to be specified | 62 |
| 20. | Staff skills etc., systems to ensure to be specified | 62 |

Schedule 4 — Sub-networks

Notes

- | | | |
|--|-------------------|----|
| | Compilation table | 65 |
|--|-------------------|----|



Western Australia

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Gas Standards Act 1972

Gas Standards (Gas Supply and System Safety) Regulations 2000

Part 1 — Preliminary

1. Citation

These regulations may be cited as the *Gas Standards (Gas Supply and System Safety) Regulations 2000*¹.

2. Commencement

These regulations come into operation on the 28th day after the day on which they are published in the *Gazette*¹.

3. Terms used

- (1) In these regulations, unless the contrary intention appears —
- accepted safety case*, in relation to —
- (a) a distribution system, means a safety case that —
 - (i) has been accepted, or is to be regarded as having been accepted, by the Director under Part 4 Division 3; and
 - (ii) has been implemented by the network operator under that Division,

and includes an accepted safety case amended under regulation 39 or 40; and

- (b) a gas plant, means a safety case that —
- (i) has been accepted, or is to be regarded as having been accepted, by the Director under Part 5; or
 - (ii) has been determined for the gas plant under that Part,

and includes an accepted safety case amended under regulation 62 or 63;

AS followed by a designation consisting of a number and a reference to a year, refers to the text, as from time to time amended and for the time being in force, of the document so designated, published by Standards Australia;

AS/NZS followed by a designation consisting of a number and a reference to a year, refers to the text, as from time to time amended and for the time being in force, of the document so designated, jointly published by Standards Australia and Standards New Zealand;

badged capacity means the capacity of a meter as shown on the manufacturer's meter badge affixed to the meter;

cubic metre or **m³** means a cubic metre at a pressure of 101.325 kPa (absolute) and a temperature of 15°C;

distribution system has the same meaning as it has in section 3 of the *Energy Coordination Act 1994*;

employee, in relation to a network operator or plant operator, means —

- (a) a person employed or engaged by the operator; or
- (b) a contractor or subcontractor to the operator; or
- (c) a person employed or engaged by a person referred to in paragraph (b);

gas plant means —

- (a) any system of pipes, equipment or apparatus utilised for the purpose of —

- (i) manufacturing, treating or storing gas with a view to supplying it to consumers through a distribution system; or
- (ii) converting gas from one form to another with a view to supplying it to consumers through a distribution system;

and

- (b) any equipment or apparatus utilised in conjunction with anything referred to in paragraph (a),

but does not include anything referred to in paragraph (a) or (b) that is connected to a pipeline within the meaning of the *Petroleum Pipelines Act 1969*;

higher heating value means the number of megajoules liberated when 1 m³ of gas is completely burnt in air and all the water formed by the combustion reaction is condensed to the liquid state, under the test conditions set down in ISO 6974 — 1984(E) for the analysis of the natural gas, using ISO 6976 — 1995(E) for the calculations from that analysis;

implementation day, in relation to a safety case, means the day notified to the Director under regulation 35(2) in respect of the safety case;

ISO, followed by a designation consisting of a number and a reference to a year, refers to the text, as from time to time amended and for the time being in force, of the document so designated, published by the International Organization for Standardization;

lower heating value means the number of megajoules liberated when 1 m³ of gas is completely burnt in air and all water formed by the combustion reaction remains in the vapour state, under the test conditions set down in ISO 6974 — 1984(E) for the analysis of the natural gas, using ISO 6976 — 1995(E) for the calculations from that analysis;

LPG means a mixture of hydrocarbons in liquid or vapour form, consisting mainly of butane, butene, propane, or propene, or any mixture of those substances;

master meter means a meter used to measure the amount of gas supplied to the point at which delivery of the gas is made to the consumer and includes any associated regulators, pipes, fittings, components, equipment or instruments;

meter means a device used to measure the amount of gas passing through the device;

natural gas means a hydrocarbon gas, in liquefied or vapour form, consisting mainly of methane;

network operator —

- (a) means an undertaker who operates a distribution system; and
- (b) in relation to a prescribed activity for the purposes of a distribution system, includes any contractor, and any subcontractor, to the system's network operator who is contracted to carry out the prescribed activity;

nominated auditor, in relation to —

- (a) the safety case or accepted safety case of a network operator, means the person whose nomination by the network operator has been accepted under regulation 30; or
- (b) the safety case or accepted safety case of a plant operator, means the person whose nomination by the plant operator has been accepted under regulation 52;

plant operator means an undertaker who operates or is to operate a gas plant;

prescribed activity means anything related to the conveyance, control, supply or use of gas done by, for, or with the authority of, the network operator in the course of the construction, maintenance, repair or operation of any part of a distribution system;

quarter means the period of 3 months beginning on 1 January, 1 April, 1 July or 1 October in any year;

safety case means a document that sets out the safety management and technical practices and procedures to be followed by —

(a) a network operator in the operation of a distribution system; or

(b) a plant operator in the operation of a gas plant,
as the case requires;

utilised, in relation to a purpose, includes capable of being, or intended to be, utilised for that purpose.

- (2) In these regulations, unless the contrary intention appears, the numerical values prescribed are subject to tolerances according to normal industry practice.

[Regulation 3 amended in Gazette 15 Oct 2010 p. 5173.]

Part 2 — Standards for gas supplied

Division 1 — General standard for gas pressure

4. Operating pressure of gas supplied to consumers, undertakers' duties as to

(1) In this regulation —
prescribed pressure, in relation to —

- (a) a gas installation that uses or is to use tempered LPG, means 0.75 kPa (gauge); and
- (b) a gas installation that uses or is to use natural gas or simulated natural gas, means 1.25 kPa (gauge); and
- (c) a gas installation that uses or is to use LPG, means 2.75 kPa (gauge);

simulated natural gas means a mixture of LPG and air having a higher heating value of more than 40 MJ/m³ but not more than 51 MJ/m³;

tempered LPG means a mixture of LPG and air having a higher heating value of more than 23.5 MJ/m³ but not more than 27.3 MJ/m³.

(2) An undertaker must ensure that the operating pressure of gas supplied to a consumer's gas installation, measured immediately after the consumer's master meter —

- (a) is not less than the prescribed pressure and not more than 3 kPa (gauge), except to the extent that the consumer and the undertaker have otherwise expressly agreed in writing; and
- (b) is within the pressure operating range specified by the manufacturer of the master meter.

(3) An undertaker must, when requested to do so, advise a consumer as to the greatest pressure of gas to which a consumer's gas installation could be subject in the event of a supply fault causing a breach of subregulation (2).

Division 2 — Standards for natural gas

5. Quality of gas supplied to consumers, undertakers' duties as to

[(1) deleted]

(2) An undertaker must ensure that natural gas supplied to a consumer through a distribution system —

(a) complies with AS 4564-2005: *Specification for general-purpose natural gas* Table 3.1; and

[(b)-(d) deleted]

(e) is odourised in accordance with regulation 6 and is subject to periodic sampling to determine the effectiveness of the odourising.

(3) Despite subregulation (2)(e) the Director may, in a particular case or class of case, permit an undertaker to supply natural gas that is not odourised if —

(a) the gas is to be delivered for further processing or use; and

(b) the odourant would serve no useful purpose as a warning agent.

(4) The requirement in subregulation (2)(e) does not apply in relation to natural gas that is the subject of a permission under subregulation (3).

(5) The undertaker must ensure that records are kept of sampling conducted under subregulation (2)(e) for a period of 3 years from the date of sampling.

[Regulation 5 amended in Gazette 8 Jan 2010 p. 11.]

6. Odourising natural gas

Natural gas must be odourised by the addition to the gas of an odourant that —

(a) is distinctive, unpleasant and non-persistent; and

- (b) when the gas is discharged, throughout that discharge indicates to a person with a normal sense of smell the presence of gas down to $\frac{1}{5}$ the lower explosive limit in air; and
- (c) complies with the requirements for natural gas set out in Schedule 1.

[Regulation 6 amended in Gazette 8 Jan 2010 p. 11.]

Division 3 — Standards for LPG

7. Quality of LPG supplied to consumers, undertakers' duties as to

- (1A) An undertaker must ensure that LPG supplied to a consumer in liquid form for use as a fuel in a gas appliance —
 - (a) if it consists predominantly of —
 - (i) propane; or
 - (ii) propane and propene,
complies with the requirements for commercial propane in AS 4670-2006 — *Commercial propane and commercial butane for heating purposes* Table 1; and
 - (b) is odourised in accordance with regulation 9 and is subject to periodic sampling to determine the effectiveness of the odourising.
- (1) An undertaker must ensure that LPG supplied to a consumer in liquid form for use as a fuel in a gas appliance —
 - (a) if it consists predominantly of —
 - (i) butane; or
 - (ii) butane and butene,
complies with the requirements for commercial butane in AS 4670-2006 — *Commercial propane and commercial butane for heating purposes* Table 1; and

- (b) is odourised in accordance with regulation 9 and is subject to periodic sampling to determine the effectiveness of the odourising.
- (2) Despite subregulation (1A)(b) or (1)(b), the Director may, in a particular case or class of case, permit an undertaker to supply LPG that is not odourised if the gas —
 - (a) is to be used as a propellant in aerosol type containers; or
 - (b) is to be delivered for further processing or use, and the odourant would serve no useful purpose as a warning agent.
- (3) The requirement in subregulation (1A)(b) or (1)(b) does not apply in relation to LPG that is the subject of a permission under subregulation (2).
- (4) The undertaker must ensure that records are kept of sampling conducted under subregulation (1A)(b) or (1)(b) for a period of 3 years from the date of sampling.

[Regulation 7 amended in Gazette 8 Jan 2010 p. 11-12.]

[8. Deleted in Gazette 8 Jan 2010 p. 12.]

9. Odourising LPG

The LPG must be odourised by the addition to the gas of an odourant that —

- (a) is distinctive, unpleasant and non-persistent; and
- (b) when the gas is discharged, throughout that discharge indicates to a person with a normal sense of smell the presence of gas down to $\frac{1}{5}$ the lower explosive limit in air; and
- (c) complies with the requirements contained in the Table for LP gas in Schedule 1.

[Regulation 9 amended in Gazette 8 Jan 2010 p. 13.]

[10, 11. Deleted in Gazette 8 Jan 2010 p. 13.]

12. Mixed LPG supplied to consumers, undertakers' duties as to

An undertaker must ensure that where LPG is supplied to a consumer as mixed LPG —

- (a) it is a mixture of —
 - (i) propane or propene, or propane and propene; and
 - (ii) butanes or butenes, or butanes and butenes;and
- (b) its vapour pressure does not exceed 1 530 kPa (gauge) at 40°C; and
- (c) the container in which it is supplied is marked with —
 - (i) the designation “Mixed LPG”; and
 - (ii) the maximum and minimum points of the vapour pressure range in kPa (gauge) at 40°C.

13. LPG supplied through distribution system, undertakers' duties as to

- (1) An undertaker must ensure that where LPG is supplied to consumers through a distribution system —
 - (a) it is supplied as propane; and
 - (b) it is supplied in vapour form; and
 - (c) the pressure at which it is supplied does not exceed 200 kPa (gauge); and
 - (d) it is odourised in accordance with regulation 9 and is subject to periodic sampling to determine the effectiveness of the odourising.
- (2) The undertaker must ensure that records are kept of sampling conducted under subregulation (1)(d) for a period of 3 years from the date of sampling.

Part 3 — Metering

14. Term used: commencement

In this Part —

commencement means the day on which these regulations come into operation ¹.

15. Master meters, operating requirements for

- (1) A network operator must ensure that every master meter installed after commencement with a badged capacity of not more than 6 m³ per hour complies with the requirements of AS 4647-2005 *Domestic diaphragm gas meters*.
- (2) A network operator must ensure that every master meter not referred to in subregulation (1) installed after commencement measures, at the time of installation, the consumption of gas within a margin of error not exceeding plus or minus 1.5% of the actual volume of gas supplied.
- (3) Subject to the requirement in subregulation (2), a network operator must ensure that every master meter, whether installed before, on or after commencement, measures the consumption of gas within a margin of error of —
 - (a) plus or minus 2% of the actual volume of gas supplied, if the master meter has a badged capacity of more than 6 m³ per hour; or
 - (b) plus or minus 3% of the actual volume of gas supplied, if the master meter has a badged capacity of not more than 6 m³ per hour.

[Regulation 15 amended in Gazette 15 Oct 2010 p. 5173.]

16. Master meters, replacement of

A network operator must ensure that every master meter installed after commencement is replaced at intervals not exceeding —

r. 17

- (a) 5 years, in the case of turbine meters; and
- (b) 10 years, in the case of rotary meters; and
- (c) 10 years, in the case of diaphragm meters with a badged capacity of more than 12 m³ per hour; and
- (d) 14 years, in the case of diaphragm meters with a badged capacity of more than 6 m³ per hour but not more than 12 m³ per hour; and
- (e) 18 years, in the case of diaphragm meters with a badged capacity of not more than 6 m³ per hour,

and in each case the first interval is to be calculated from the date of installation.

17. Alternative requirements to r. 15 or 16, approval of

- (1) The Director may give approval in writing for a network operator, when supplying gas in a place or from a part of a distribution system described in the approval, to comply with an alternative requirement instead of a requirement under regulation 15 or 16.
- (2) A requirement under regulation 15 or 16 does not apply to the extent that a network operator complies with an alternative to that requirement in accordance with an approval under subregulation (1).

Part 3A — Entry and commingling of gas of different qualities

[Heading inserted in Gazette 4 Jan 2008 p. 3.]

Division 1 — Preliminary

[Heading inserted in Gazette 4 Jan 2008 p. 3.]

17A. Terms used

In this Part, unless the contrary intention appears —

approved plan means a management plan approved under regulation 17E and includes the plan as amended or replaced under regulation 17F or 17G;

corporation means —

- (a) a company within the meaning given in the *Corporations Act 2001* (Commonwealth) section 9; or
- (b) any other body corporate, or body corporate of a kind, prescribed by the regulations;

determined heating value means the heating value for a HHV zone determined under regulation 17J(2) or (3);

emergency means any event or circumstance arising in relation to a distribution system or sub-network or a pipeline from which gas is injected into a distribution system or sub-network that has a significant effect on the higher heating value of gas in a zone or zones;

flow weighted average higher heating value or ***FWAHHV*** means the flow weighted average higher heating value of gas in a HHV zone on a gas day, calculated in accordance with the approved plan relating to the distribution system that includes the HHV zone;

gas day means the 24 hour period beginning at 0800 hours on a day and ending at 0800 hours on the following day;

HHV zone means a HHV zone in a distribution system or sub-network established under regulation 17I(2), (3) or (5);

implementation period means —

- (a) in relation to an approved plan approved or taken to have been approved under regulation 17E, a period of 2 months, or any other period not exceeding 6 months specified in the plan for the purposes of this paragraph of this definition, beginning on the day on which the plan is approved or taken to have been approved; or
- (b) in relation to the replacement of an approved plan under regulation 17F, a period of one month, or any other period not exceeding 2 months specified in the replacement plan for the purposes of this paragraph of this definition, beginning on the day on which the replacement is approved or taken to have been approved;

leanest supplied higher heating value or ***LSHHV*** means the higher heating value of gas supplied to a consumer from a HHV zone on a gas day with the lowest flow weighted higher heating value, calculated in accordance with the approved plan relating to the distribution system that includes the HHV zone;

management plan means a plan that meets the requirements of regulation 17C(1) or (2);

officer, in relation to a body corporate, has the meaning given to ***officer*** of a corporation in the *Corporations Act 2001* (Commonwealth) section 9 but does not include an employee of the body corporate unless the employee is concerned in the management of the body corporate;

permitted range means the range determined under regulation 17I(3)(b);

retail market scheme means a retail market scheme approved under the *Energy Coordination Act 1994* Part 2B Division 3;

sub-network means each part of a distribution system listed in Schedule 4.

[Regulation 17A inserted in Gazette 4 Jan 2008 p. 3-5.]

Division 2 — Approved plan

[Heading inserted in Gazette 4 Jan 2008 p. 5.]

17B. When approved plan is required

- (1) A network operator must not operate a distribution system in which gas of different qualities from 2 or more pipelines is commingled without an approved plan relating to the operation of the system.
- (2) If a network operator is a corporation, an officer of the network operator must ensure that gas of different qualities from 2 or more pipelines is not commingled in a distribution system of the network operator unless there is an approved plan relating to the operation of the system.
- (3) A pipeline operator must not inject gas into a distribution system in which gas of different qualities from 2 or more pipelines is commingled without an approved plan relating to the injection of gas into that system.
- (4) If a pipeline operator is a corporation, an officer of the pipeline operator must ensure that gas is not injected from a pipeline of the pipeline operator into a distribution system in which gas of different qualities from 2 or more pipelines is commingled unless there is an approved plan relating to the injection of gas into that system from the pipeline.
- (5) This regulation does not apply to —
 - (a) a network operator or an officer of a network operator during the implementation period for an approved plan, or the replacement for an approved plan, relating to the operation of the network operator's distribution system; or
 - (b) a pipeline operator or an officer of a pipeline operator during the implementation period for an approved plan, or the replacement for an approved plan, relating to the

injection of gas into a distribution system from a pipeline of the pipeline operator.

[Regulation 17B inserted in Gazette 4 Jan 2008 p. 5-6.]

17C. Management plan for distribution system, content of

- (1) A management plan submitted by a network operator in relation to the operation of its distribution system is to —
 - (a) set out details of the distribution system, including in particular any sub-network of the system, to which it applies; and
 - (b) set out the configuration and operational characteristics of the distribution system; and
 - (c) work together with the management plan of a pipeline operator that injects gas into the system; and
 - (d) set out the methods or processes to be followed by the network operator in calculating the flow weighted average higher heating value of the gas transported through the distribution system or a sub-network of it and establishing a HHV zone or HHV zones in the distribution system or a sub-network of the system; and
 - (e) specify how the network operator is to publish or give interested persons details of the establishment of a HHV zone or HHV zones in a distribution system or a sub-network of the system; and
 - (f) set out the means for calculating and validating the flow weighted average higher heating value of gas in a HHV zone on a gas day; and
 - (g) set out the means for calculating the higher heating value of gas with the lowest flow weighted higher heating value supplied to a consumer from a HHV zone on a gas day; and
 - (h) set out principles, methods and processes to be applied by the network operator in the operation of a distribution system to ensure that the FWAHHV for a HHV zone on

- a gas day less the LSHHV for the HHV zone on that day is not more than 1 MJ/m^3 ; and
- (i) set out measures to be taken by the network operator if the higher heating value of gas supplied through a HHV zone to a consumer is persistently less than the permitted range for the HHV zone; and
 - (j) set out the number of days in any period of 100 days on which the FWAHHV for a HHV zone less the LSHHV for the HHV zone must not be more than 1 MJ/m^3 and specify what action will be taken by the network operator if that number is exceeded; and
 - (k) provide that the network operator is to give to the Director at quarterly intervals (or such other intervals specified by the Director from time to time after consulting the network operator) a report on monitoring activity undertaken by the network operator in respect of gas entering the distribution system; and
 - (l) set out audit requirements in relation to the determination by the network operator of the heating value of gas under regulation 17J(1); and
 - (m) provide for an annual audit to be carried out on the operation of the management plan and for a report on the audit to be given to the Director.
- (2) A management plan submitted by a pipeline operator in relation to the injection of gas into a distribution system from a pipeline of the operator is to —
- (a) identify the distribution system and any sub-network of the system into which gas is injected; and
 - (b) work together with the management plan of the network operator of the distribution system; and
 - (c) set out details of the gas injected into the system by the pipeline operator including —
 - (i) the higher heating value of the injected gas; and

- (ii) the volume of gas injected on a gas day; and
 - (iii) the rate at which it is injected; and
 - (iv) if gas of different qualities is injected, the mixing ratios in respect of that gas;
- and
- (d) specify how and when the pipeline operator will advise the network operator of the distribution system about any change in the specifications referred to in paragraph (c); and
- (e) set out which, and how, facilities will be used by the pipeline operator to —
 - (i) inject gas into the distribution system; and
 - (ii) control and monitor that injection;
- and
- (f) provide for the implementation of systems to —
 - (i) ensure, as far as is reasonably practicable, that commingling occurs at a controlled or determined rate; and
 - (ii) minimise, as far as is reasonably practicable, variations in the higher heating value of gas injected by the pipeline operator into a distribution system on any gas day;
- and
- (g) set out how the pipeline operator will, and which facilities will be used by the pipeline operator to, calculate the higher heating value of gas injected into the distribution system on each gas day including —
 - (i) the location of sample points; and
 - (ii) the method of calculation; and
 - (iii) the frequency of sampling and analysis; and
 - (iv) the details of the provision of backup measurement facilities or the processes the

operator will use if facilities fail to operate or are unavailable;

and

(h) provide for the recording of data in respect of the higher heating value and flow of gas injected into the distribution system on each gas day; and

(i) provide for the data referred to in paragraph (h) —

(i) if a retail market scheme applies to the distribution system or sub-network and that scheme provides for the pipeline operator to give the network operator data the same as that referred to in paragraph (h), to be given to the network operator in the form and at the intervals specified in the scheme; or

(ii) if subparagraph (i) does not apply, to be given to the network operator in the form and at the intervals determined by the Director after consultation with the pipeline operator;

and

(j) set out measures to be taken by the pipeline operator if a facility referred to in paragraph (e) malfunctions; and

(k) provide for an annual audit to be carried out on the operation of the management plan and for a report on the audit to be given to the Director.

[Regulation 17C inserted in Gazette 4 Jan 2008 p. 6-9.]

17D. Management plan to be submitted for approval

(1) In this regulation —

existing operator, in relation to a distribution system, means a person who already carries out gas operations on the relevant day;

gas operations means —

(a) the operation of a distribution system; or

(b) the injection of gas into a distribution system;

new operator, in relation to a distribution system, means a person who is to commence gas operations after the relevant day;

relevant day means the day on which the *Gas Standards (Gas Supply and System Safety) Amendment Regulations 2007* come into operation¹.

- (2) Each existing operator, and each new operator, must submit a management plan relating to the operation of or the injection of gas into the system, as the case may be, to the Director for approval.
- (3) An existing operator must comply with subregulation (2) within 3 months after the relevant day.
- (4) A new operator must comply with subregulation (2) not less than one month before the day on which the operator is to commence gas operations.

[Regulation 17D inserted in Gazette 4 Jan 2008 p. 9.]

17E. Management plan, approval of etc.

- (1) Subject to subregulation (5), the Director may in writing —
 - (a) approve a management plan submitted under regulation 17D; or
 - (b) request that it be amended.
- (2) If the Director requests a network operator or pipeline operator to amend a management plan, the request must be accompanied by written reasons of the Director for requesting the amendment.
- (3) The network operator or pipeline operator must comply with a request under subregulation (1)(b) within one month of the day on which the Director made the request by submitting a management plan amended in accordance with the Director's request.

- (4) Subject to subregulation (5), the Director must approve a management plan amended as requested under subregulation (1)(b).
- (5) The Director is not to approve a management plan if the Director considers that it —
 - (a) will not meet the requirements of regulation 17C in respect of such plans; or
 - (b) will be inconsistent with the Act or any other written law.
- (6) If the Director has not given an approval or made a request under subregulation (1)(b) within one month of the submission of a management plan, the Director is to be taken to have approved the plan on the last day of that period of one month.

[Regulation 17E inserted in Gazette 4 Jan 2008 p. 9-10.]

17F. Approved plan, amendment or replacement of

- (1) With the approval of the Director, a network operator or pipeline operator may amend or replace an approved plan.
- (2) A network operator or pipeline operator must submit any proposed amendment or replacement to the Director for approval.
- (3) If an amendment or replacement is submitted, the Director may in writing —
 - (a) subject to subregulation (7), approve it; or
 - (b) request that it be amended; or
 - (c) refuse to approve it.
- (4) If the Director requests that an amendment or replacement be amended, the request must be accompanied by written reasons of the Director for requesting the amendment.

- (5) A network operator or pipeline operator must comply with a request under subregulation (3)(b) within one month of the day on which the Director made the request by submitting an amendment or replacement amended in accordance with the Director's request.
- (6) Subject to subregulation (7), the Director must approve an amendment or replacement amended as requested under subregulation (3)(b).
- (7) The Director is not to approve an amendment or replacement of an approved plan if the Director considers that it —
 - (a) will not meet the requirements of regulation 17C in respect of management plans; or
 - (b) will be inconsistent with the Act or any other written law.
- (8) If the Director has not given an approval, made a request or refused to approve an amendment or replacement under subregulation (3) within one month of the submission of the proposed amendment or replacement, the Director is to be taken to have approved the proposed amendment or replacement on the last day of that period of one month.

[Regulation 17F inserted in Gazette 4 Jan 2008 p. 10-11.]

17G. Approved plan, Director may direct to be amended

- (1) This regulation applies if, in the opinion of the Director, an approved plan —
 - (a) does not meet the requirements of regulation 17C in respect of management plans; or
 - (b) is no longer consistent with the Act or any other written law.
- (2) The Director may direct a network operator or pipeline operator to amend an approved plan, within a specified period, in a manner specified by the Director in writing.

- (3) The network operator or pipeline operator must comply with a direction under subregulation (2).
- (4) If a network operator or pipeline operator does not comply with a direction under subregulation (2) to amend an approved plan within the period specified by the Director, the approved plan ceases to have effect at the end of that period.

[Regulation 17G inserted in Gazette 4 Jan 2008 p. 11.]

17H. Approved plan, effect of

- (1) A network operator must ensure that an approved plan relating to the operation of its distribution system is implemented and that any requirements set out in it are complied with.
- (2) A pipeline operator must ensure that an approved plan relating to the injection of gas into a distribution system from a pipeline of the operator is implemented and that any requirements set out in it are complied with.
- (3) Subregulations (1) and (2) do not apply during an emergency.

[Regulation 17H inserted in Gazette 4 Jan 2008 p. 11-12.]

Division 3 — Determination of heating value of gas

[Heading inserted in Gazette 4 Jan 2008 p. 12.]

17I. HHV zone or zones, network operator's duties to establish etc.

- (1) This regulation applies if —
 - (a) gas of different qualities from 2 or more pipelines is injected into a network operator's distribution system or sub-network; and
 - (b) that gas is commingled in the system or sub-network.
- (2) If the FWAHHV (calculated in accordance with the relevant approved plan) of the gas transported through a distribution system or sub-network throughout the system or sub-network

does not vary by more than 1 MJ/m^3 , the network operator of the distribution system or sub-network must from time to time, in accordance with the relevant approved plan, establish one HHV zone for that system or sub-network.

- (3) If the FWAHHV (calculated in accordance with the relevant approved plan) of the gas transported through a distribution system or sub-network varies by more than 1 MJ/m^3 in parts of the system or sub-network, the network operator of the distribution system or sub-network must from time to time, in accordance with the relevant approved plan —
 - (a) establish HHV zones in that system or sub-network for each of those parts where those heating values exist so that the FWAHHV of the gas in a zone does not vary by more than 1 MJ/m^3 ; and
 - (b) determine the range of the FWAHHV, not more than 1 MJ/m^3 , for gas in the zones.
- (4) A network operator must review a HHV zone or HHV zones in the following circumstances —
 - (a) at intervals of not more than 13 months commencing on the day on which the HHV zone or HHV zones are first established;
 - (b) if there is a material and sustained change in the quantity or the higher heating value of the gas injected into the network or sub-network by a pipeline operator.
- (5) After reviewing the HHV zone or HHV zones, the network operator must cancel the HHV zone or HHV zones and establish a new HHV zone or new HHV zones if that is necessary in order to comply with subregulation (2) or (3).
- (6) On each occasion that a network operator establishes a HHV zone or HHV zones in a distribution system or sub-network, the network operator must give the Director a plan of the system or sub-network showing —
 - (a) the zone or zones; and

(b) the permitted range for the zone or zones.

- (7) The plan referred to in subregulation (6) must be given to the Director not later than 5 days after the zone or zones are established.

[Regulation 17I inserted in Gazette 4 Jan 2008 p. 12-13.]

17J. Heating value of gas, network operator's duties to determine etc.

- (1) As soon as practicable after the end of each gas day, the network operator must determine the heating value of the gas transported through —
- (a) if the distribution system or a sub-network of the system has only one HHV zone, that HHV zone; or
 - (b) if the distribution system or a sub-network of the system has more than one HHV zone, each of those HHV zones,
- in accordance with subregulation (2) or (3).
- (2) If the FWAHHV for a HHV zone less the LSHHV for the HHV zone is less than or equal to 1 MJ/m^3 , the determined heating value for the HHV zone is the FWAHHV.
- (3) If the FWAHHV for a HHV zone less the LSHHV for the HHV zone is more than 1 MJ/m^3 , the determined heating value for the HHV zone is the LSHHV plus 1 MJ/m^3 .
- (4) For each gas day, a network operator must cause the determined heating value of gas transported through the HHV zone or HHV zones of the network operator's distribution system or sub-network to be published by the specified time —
- (a) on a website maintained by the network operator and to which the Director and retail gas operators, within the meaning given in the *Energy Coordination Act 1994* section 11ZOC(1)(b), have access; or
 - (b) by such other means as the Director approves in writing on the written application of a network operator.

Gas Standards (Gas Supply and System Safety) Regulations 2000

Part 3A Entry and commingling of gas of different qualities

Division 3 Determination of heating value of gas

r. 17J

- (5) For the purpose of subregulation (4), the specified time is —
- (a) if a retail market scheme applies to the distribution system or sub-network and that scheme requires the network operator to publish information the same as the determined heating value by a specified time, that time; or
 - (b) if paragraph (a) does not apply, 1200 hours on the day following the end of the gas day or the time specified in the relevant approved plan for the purposes of this paragraph, whichever is the later.
- (6) If the determined heating value is determined under subregulation (3), the network operator must, as soon as reasonably practicable and in accordance with the approved plan, give the Director a written notice specifying —
- (a) the gas day for which the determination was made; and
 - (b) the determined heating value for that day.

[Regulation 17J inserted in Gazette 4 Jan 2008 p. 13-14.]

Part 4 — Distribution system safety

Division 1 — Obligations related to the carrying out of prescribed activities

18. Prescribed activities, network operator's duties as to

- (1) A network operator must ensure that each prescribed activity is, so far as is reasonable and practicable, carried out in such a way as to —
 - (a) provide for the safety of persons; and
 - (b) avoid or minimise any damage to property, inconvenience, or other detriment as a result of the activity.

- (2) Without limiting subregulation (1), a network operator must ensure that —
 - (a) adequate work procedures and practices are developed and implemented; and
 - (b) proper plans are developed and implemented for the inspection, maintenance and (if necessary) replacement of the distribution system; and
 - (c) adequate records of the location of the distribution system are maintained and made available on request to —
 - (i) the Director; or
 - (ii) a person who, for reasons of safety, requires access to the records;

and

 - (d) adequate supervision is provided taking into account the nature of the activity and the competency of the personnel carrying out the activity; and
 - (e) the design, engineering and operation of the distribution system are regularly reviewed for safety and effectiveness.

[19. Deleted in Gazette 8 Jan 2010 p. 13.]

20. Compliance with r. 18, compliance with accepted safety case is evidence of

Compliance by a network operator with a practice, procedure or provision described in regulation 37 is evidence of compliance by that network operator with regulation 18.

[Regulation 20 amended in Gazette 8 Jan 2010 p. 13.]

21. Prescribed activities, duties of people carrying out

(1) A person must avoid, so far as is reasonable and practicable, doing anything, or permitting anything to be done, in the course of carrying out a prescribed activity, that results, or is likely to result, in —

- (a) a person sustaining any personal injury; or
- (b) damage to any property or significant inconvenience or other detriment to any person.

(2) In subregulation (1) —

- (a) the reference to doing anything includes a reference to omitting to do anything; and
- (b) the reference to permitting anything to be done includes a reference to permitting an omission to do anything.

22. Major activities, network operator to notify Director of proposed

(1) In this regulation —

major activity means any of the following kinds of prescribed activity —

- (a) construction of high pressure pipelines having a diameter of 100 mm or more and a length of 100 m or more;
- (b) construction of medium and low pressure gas mains having a diameter of 150 mm or more and a length of 300 m or more;

- (c) construction of high pressure gate stations;
 - (d) construction of district regulator sets fed from high pressure pipelines.
- (2) A network operator must —
- (a) give to the Director written notice of each major activity not less than 7 days before it is carried out; or
 - (b) submit to the Director, not less than 7 days before the beginning of each quarter, a written outline of the major activities that the network operator proposes to carry out in that quarter.
- (3) If, in a particular quarter, a network operator proposes to carry out a major activity that was not mentioned in an outline submitted in respect of that quarter under subregulation (2)(b), the network operator must give to the Director written notice of that major activity not less than 7 days before it is carried out.
- (4) A notice or outline under this regulation —
- (a) is to be in a form acceptable to the Director; and
 - (b) may be submitted by facsimile transmission or other electronic means.
- (5) The network operator must provide the Director with information on any major activity referred to in a notice or outline under this regulation if the Director so requests.

23. Employees etc., duties of network operator etc. to inform etc.

- (1) In this regulation —
- contractor***, in relation to a network operator, means a contractor or subcontractor to the operator;
- employee*** —
- (a) in relation to a contractor, means a person employed or engaged by the contractor;
 - (b) in relation to a network operator, means a person employed or engaged by the operator.

- (2) A network operator must ensure, so far as is reasonable and practicable, that any employee or contractor engaged in carrying out a prescribed activity —
- (a) is provided with documents setting out appropriate work standards, procedures and practices; and
 - (b) is given instruction and training, and tested for competency, in how to safely apply and use those standards, procedures and practices.
- (3) A contractor to a network operator must ensure, so far as is reasonable and practicable, that any employee engaged in carrying out a prescribed activity —
- (a) is provided with —
 - (i) copies of any documents provided to the contractor by the network operator under subregulation (2)(a); or
 - (ii) other documents approved by the network operator that set out appropriate work standards, procedures and practices;and
 - (b) is given instruction and training, and tested for competency, in a manner approved by the network operator, in how to safely apply and use the standards, procedures and practices set out in those documents.
- (4) Work standards, procedures and practices are not appropriate for the purposes of subregulation (2) unless they are consistent with these regulations.

[Regulation 23 inserted in Gazette 8 Jan 2010 p. 13-14.]

24. Threats to safety of people or property, network operator's duties to investigate etc.

- (1) In subregulation (2) —
- former distribution system*** means anything owned by the network operator that would be a distribution system if it were

still utilised for a purpose for which it previously was, but no longer is, utilised.

- (2) If a network operator becomes aware that —
- (a) anything at a place where a prescribed activity is being carried out; or
 - (b) the condition of any part of a distribution system or former distribution system at any place,

is a threat to the safety of any person or property, the network operator must investigate the matter as soon as is practicable.

- (3) If the investigation reveals that there is a threat to the safety of any person or property, the network operator must take such remedial action as is required to remove the threat as soon as is practicable.

[Regulation 24 inserted in Gazette 8 Jan 2010 p. 14.]

[Division 2 (r. 25-26) deleted in Gazette 8 Jan 2010 p. 14.]

Division 3 — Safety case provisions

27. Safety case, network operator to submit to Director and content of

- (1) A network operator must submit a safety case to the Director for the distribution system of the network operator.
- (2) The safety case must comply with each of these standards —
 - (a) AS/NZS 4645.1:2008 *Gas distribution networks Part 1: Network management*;
 - (b) if it applies to the distribution system —
AS 2885.1-2007 *Pipelines — Gas and liquid petroleum Part 1: Design and construction*;
 - (c) if it applies to the distribution system —
AS 2885.3-2001 *Pipelines — Gas and liquid petroleum Part 3: Operation and maintenance*.

- (3) If, on the day on which the *Gas Standards (Gas Supply and System Safety) Amendment Regulations (No. 2) 2009* regulation 14(1) comes into operation¹, a network operator has a safety case for a distribution system of the operator that has effect, subregulation (1) does not apply to the operator until the safety case ceases to have effect.

*[Regulation 27 amended in Gazette 8 Jan 2010 p. 15;
15 Oct 2010 p. 5173.]*

28. Exemption from s. 27(2)

- (1) The Director may, by instrument —
- (a) exempt a network operator from compliance with a provision of a standard referred to in regulation 27(2) if the Director is satisfied that compliance with the provision would be inappropriate having regard to the size or complexity of the distribution system of the network operator; or
 - (b) at any time revoke an exemption.
- (2) The Director may —
- (a) make the exemption subject to any condition; and
 - (b) impose any further condition or vary or revoke a condition at any time.

[Regulation 28 amended in Gazette 8 Jan 2010 p. 15.]

29. Guidelines to preparation of safety case, Director may issue

The Director may from time to time issue guidelines to assist in the preparation of a safety case.

30. Nominated auditor, nominating etc.

- (1) Before submitting a safety case under regulation 27 a network operator must nominate to the Director a person who, in the opinion of the network operator, is —
- (a) independent of the network operator; and

- (b) competent to perform the functions of a nominated auditor under this Division,

and provide the Director with enough information to enable the Director to decide whether or not to accept the nomination.

- (2) The Director may issue guidelines as to —
 - (a) the qualifications for nomination under subregulation (1); and
 - (b) the information to be provided under that subregulation.
- (3) The Director may accept a nomination under subregulation (1) or reject it.
- (4) A nomination is to be regarded as having been accepted unless, within 10 working days after receiving the nomination, the Director notifies the network operator that the Director has decided to reject the nomination.
- (5) If the Director decides to reject a nomination, the network operator may make an alternative nomination to the Director in accordance with subregulation (1).
- (6) Notification under subregulation (4) is to be in writing and is to give reasons for the Director's decision.

31. Certification of safety case by nominated auditor

- (1) A safety case submitted under regulation 27 is to be accompanied by a certificate signed by the nominated auditor certifying that —
 - (a) the safety case complies with the requirements of this Division; and
 - (b) the safety case is appropriate having regard to the size and complexity of the distribution system and the possible risks; and

- (c) the safety case adequately identifies the measures necessary —
 - (i) to prevent hazardous events identified in the safety case from occurring; and
 - (ii) to protect consumers, the public, employees, plant, equipment and the environment, should such events occur;and
 - (d) the safety case adequately identifies the training and equipment requirements necessary for personnel to be able to implement the various procedures set out in it; and
 - (e) the network operator has in place a plan (the ***implementation plan***) for —
 - (i) implementing the measures referred to in paragraph (c); and
 - (ii) meeting the requirements referred to in paragraph (d).
- (2) The certificate is to —
- (a) include a summary of the procedures, standards, tests, inspections and maintenance measures contained in the safety case; and
 - (b) specify the estimated time for completion of the matters covered by the implementation plan.

32. Assessment and approval of safety case by Director

- (1) The Director must assess any safety case submitted in accordance with this Division.
- (2) Following an assessment under subregulation (1), the Director may approve the safety case for the purposes of certification under regulation 33(1) or refuse approval, and is to notify the network operator in writing of the decision.

- (3) If the Director has not given notification under subregulation (2) within 20 working days after receiving the safety case (and the accompanying certificate), the safety case is to be regarded as having been approved for the purposes of certification under regulation 33(1).
- (4) Notification under subregulation (2) of a refusal to approve the safety case is to give —
 - (a) reasons for the refusal; and
 - (b) guidance as to the changes needed to make the safety case acceptable.
- (5) If the Director refuses to approve the safety case, the network operator may review and amend the safety case and submit it to the Director again in accordance with this Division.

33. Certification of approved safety case by nominated auditor

- (1) If a safety case is approved, or regarded as having been approved, under regulation 32, the network operator may, within such period as the Director allows having regard to the time specified under regulation 31(2)(b), submit to the Director a certificate signed by the nominated auditor certifying that —
 - (a) the measures referred to in regulation 31(1)(c) have been implemented; and
 - (b) the requirements referred to in regulation 31(1)(d) have been met.
- (2) The certificate is to specify the day on which the network operator proposes to implement the safety case if it is accepted under regulation 34(1).

34. Acceptance or rejection of safety case by Director

- (1) On receipt of a certificate under regulation 33(1), the Director may accept the safety case or reject it, and is to notify the network operator in writing of the decision.

- (2) The Director may only reject the safety case if the Director is satisfied that —
 - (a) the measures referred to in regulation 31(1)(c) have not been implemented; or
 - (b) the requirements referred to in regulation 31(1)(d) have not been met.
- (3) If the Director has not given notification under subregulation (1) within 14 working days after receiving the certificate, the safety case is to be regarded as having been accepted.
- (4) Notification under subregulation (1) of the rejection of the safety case is to give reasons for the rejection and specify the measures to be taken or requirements to be met to make the safety case acceptable.
- (5) If the Director rejects a safety case, the network operator may submit to the Director a certificate signed by the nominated auditor certifying that —
 - (a) measures specified in the notification under subregulation (1) have been taken; or
 - (b) requirements specified in that notification have been met,

and this regulation applies, with all necessary changes, as if the certificate were a certificate under regulation 33(1).

35. When accepted safety case ceases to have effect; Director to be notified of implementation of safety case

- (1) The acceptance of a safety case ceases to have effect for the purposes of these regulations if the network operator has not implemented it within 6 months or such other period not greater than 18 months specified by the Director in the notification of acceptance under regulation 34(1), after —
 - (a) notification of its acceptance is received under regulation 34(1); or

- (b) it is regarded as having been accepted under regulation 34(3),

as the case may be.

- (2) The network operator must notify the Director of the day on which the safety case is to be implemented not less than 7 days before that day.
- (3) Notification under subregulation (2) is to be in writing.

[Regulation 35 amended in Gazette 8 Jan 2010 p. 15.]

36. Accepted safety case, duration of after implementation

Subject to regulation 40(5), an accepted safety case has effect in relation to a distribution system for the period of 5 years beginning on implementation day.

37. Accepted safety case, effect of

If an accepted safety case has effect in relation to a distribution system, the network operator must ensure that a prescribed activity is carried out in such a way as to comply with —

- (a) any practice or procedure set out in the accepted safety case; and
- (b) any provision of a code, standard or specification compliance with which is required under the accepted safety case.

38. Accepted safety case, periodical audit of

- (1) A network operator must, within one month after the end of each auditing period, lodge with the Director in respect of an accepted safety case a report by a person appointed by the network operator —
 - (a) certifying that —
 - (i) the measures referred to in regulation 31(1)(c) are still in place; and

- (ii) there continue to be properly trained and equipped personnel available to implement the various procedures set out in the accepted safety case;
 - and
 - (b) reviewing the accepted safety case for its adequacy and appropriateness having regard to any changes in the distribution system since a report was last lodged under this subregulation; and
 - (c) making recommendations as to the amendments (if any) required to the accepted safety case.
- (2) The person appointed for the purposes of subregulation (1) is to be a person who, in the opinion of the network operator, is suitably qualified to provide an independent and objective report, but nothing in this subregulation prevents the appointment of an employee of the network operator.
- (3) In subregulation (1) —
- auditing period*** means —
- (a) if a report is being lodged under subregulation (1) for the first time in respect of the accepted safety case, a period of 12 months commencing on implementation day; or
 - (b) otherwise, a period of 12 months, or such further period as the Director allows, commencing on the day on which a report was last lodged under subregulation (1) in respect of the accepted safety case.

39. Accepted safety case, amending

- (1) A network operator may submit amendments to an accepted safety case to the Director for approval.
- (2) If a report under regulation 38 recommends amendments to an accepted safety case, the network operator must submit amendments consistent with those recommendations to the Director for approval.

- (3) The Director may approve or refuse to approve amendments submitted under subregulation (1) or (2), and is to notify the network operator in writing of the decision.
- (4) Notification under subregulation (3) of a refusal to approve amendments is to give reasons for the refusal and guidance as to any changes needed to make the amendments acceptable.

40. Director may require accepted safety case to be amended

- (1) If the Director is satisfied that an accepted safety case will no longer produce a safe outcome, the Director may, by notice in writing, require the network operator to make specified amendments to the accepted safety case within a specified period.
- (2) A network operator must comply with a requirement under subregulation (1) within the specified period.
- (3) If a network operator contravenes subregulation (2), the Director may, by notice in writing, suspend the operation of the accepted safety case with effect from the specified day until the relevant requirement is complied with.
- (4) Before giving notice under subregulation (3), the Director is to give the network operator a reasonable opportunity to make submissions in relation to the day to be specified in the notice for the purposes of that subregulation.
- (5) An accepted safety case does not have effect for the period of any suspension under subregulation (3).
- (6) In subregulations (1), (2) and (3) —
specified means specified in the notice concerned.

41. Records about accepted safety case, network operator's duties as to

- (1) A network operator must establish and maintain a system for keeping records required to be kept under subregulation (2) in relation to an accepted safety case.
- (2) The records required to be kept are copies of —
 - (a) the accepted safety case; and
 - (b) any amendment of the accepted safety case; and
 - (c) the certificates under regulations 31(1) and 33(1) and under regulation 34(5) (if any); and
 - (d) each report in respect of the accepted safety case under regulation 38; and
 - (e) each notification and each report given by the network operator to the Director as required by Division 4.
- (3) The network operator must ensure that the records are kept —
 - (a) at the address nominated by the network operator in the accepted safety case; and
 - (b) in a manner that makes their retrieval reasonably practicable; and
 - (c) in a secure manner.
- (4) The network operator must ensure that each of the records is kept for a period of 5 years after its creation.

Division 4 — Notification, investigation and reporting of incidents

42. Terms used

In this Division —

gas incident means an incident or event in, on or associated with a distribution system, other than a notifiable incident, that —

- (a) materially affects or is likely to materially affect the supply of gas; or
- (b) is caused by gas;

major discharge means —

- (a) the unplanned and uncontrolled release inside a building of 10 m³ or more of gas; or
- (b) the unplanned and uncontrolled release in the open air of 1 000 m³ or more of gas;

notifiable incident means an incident, event or other thing of which the Director requires notification under regulation 43;

private property means property that does not belong to —

- (a) a network operator; or
- (b) a contractor or subcontractor to a network operator;

serious damage means —

- (a) damage to private property if the value of the damage is likely to exceed \$1 000 in total; or
- (b) damage to a distribution system, or to property belonging to the network operator or a contractor or subcontractor to the network operator, if the value of the damage is likely to exceed \$10 000 in total;

serious injury means an injury that is fatal or requires the victim to be admitted to hospital whether for assessment, monitoring or treatment.

[Regulation 42 amended in Gazette 5 Sep 2000 p. 5053.]

43. Which incidents have to be notified to Director

- (1) A network operator must notify the Director of —
 - (a) any fire, explosion, or major discharge of flammable gas, in, on or from the distribution system; or
 - (b) any incident or event that is caused, or significantly contributed to, by gas and that results in —
 - (i) serious injury; or

- (ii) serious damage;
- or
- (c) any unplanned interruption to the supply of gas from the distribution system to —
 - (i) any consumer whose annual gas consumption usually exceeds, or can reasonably be expected to exceed, 50 TJ; or
 - (ii) at least 100 other consumers.
- (2) Notification under subregulation (1)(b)(i) is to be given by telephone immediately after the network operator becomes aware that serious injury has occurred.
- (3) In any other case notification is to be given in a form acceptable to the Director within 24 hours after the network operator becomes aware of the occurrence of the notifiable incident.

44. Network operator to investigate and report on notifiable incidents

- (1) If a notifiable incident occurs, then, subject to subregulation (2), the network operator must —
 - (a) investigate the incident; and
 - (b) within 14 days after the incident occurs, prepare and give to the Director a preliminary or final report on the investigation; and
 - (c) if the network operator gives the Director a preliminary report — within 30 days after the incident occurs, prepare and give to the Director a final report on the investigation.
- (2) Subregulation (1) does not apply in relation to —
 - (a) a major discharge of flammable gas coming within paragraph (b) of the definition of *major discharge* in regulation 42 unless the quantity of gas released is 3 000 m³ or more; or

- (b) an incident or event that results in serious damage unless —
 - (i) in the case of damage coming within paragraph (a) of the definition of *serious damage* in regulation 42, the value of the damage is likely to exceed \$5 000 in total; or
 - (ii) in the case of damage coming within paragraph (b) of that definition, the value of the damage is likely to exceed \$25 000 in total.
- (3) A report under subregulation (1)(b) or (c) must be in writing and in a form acceptable to the Director.

[Regulation 44 amended in Gazette 15 Oct 2010 p. 5174.]

45. Investigation of notifiable incidents by Director

- (1) If the Director intends to investigate a notifiable incident, the Director must notify the network operator of that intention.
- (2) Notification under subregulation (1) is to —
 - (a) include notification of any proposed examination of the site of the notifiable incident; and
 - (b) be given by telephone and confirmed in writing by facsimile transmission.
- (3) The Director must carry out the investigation as soon as is practicable after giving notification under subregulation (1).

46. Site of notifiable incident not to be disturbed in some cases

- (1) If a network operator is given notification as described in regulation 45(2)(a), the network operator must ensure that, so far as is practicable, the site of the notifiable incident is not disturbed in such a way as to prejudice the examination of the site except —
 - (a) as authorised by or on behalf of the Director; or

- (b) as is necessary to restore the supply of gas or to guard against the risk of personal injury, damage, or interruption to the supply of gas.
- (2) The Director must notify the network operator when the examination of the site has been completed.
- (3) Notification under subregulation (2) is to be given by telephone and is to be confirmed in writing by facsimile transmission.

47. Gas incidents, reporting requirements for

- (1) As soon as is practicable after each quarter, or such other period as the Director allows, a network operator must give to the Director a report of gas incidents that have occurred in that quarter or period.
- (2) The report is to be in a summary form acceptable to the Director.

Part 5 — Gas plant safety

48. Application of Part

This Part applies in relation to any gas plant constructed after the commencement of these regulations.

49. Safety case, plant operator to submit to Director and content of

- (1) A plant operator must submit a safety case to the Director for the gas plant of the plant operator.
- (2) A safety case submitted under subregulation (1) is to comply with Schedule 3.

50. Exemption from r. 49(1)

- (1) The Director may, by instrument —
 - (a) exempt a plant operator from compliance with regulation 49(1) if the Director is satisfied that compliance with that subregulation would be inappropriate having regard to the size or complexity of the gas plant of the plant operator; and
 - (b) at any time revoke an exemption.
- (2) The Director may —
 - (a) make the exemption subject to any condition; and
 - (b) impose any further condition or vary or revoke a condition at any time.

51. Guidelines to preparation of safety case, Director may issue

The Director may from time to time issue guidelines to assist in the preparation of a safety case.

52. Nominated auditor, nominating etc.

- (1) Before submitting a safety case under regulation 49 a plant operator must nominate to the Director a person who, in the opinion of the plant operator, is —
 - (a) independent of the plant operator; and

- (b) competent to perform the functions of a nominated auditor under this Part,
- and provide the Director with enough information to enable the Director to decide whether or not to accept the nomination.
- (2) The Director may issue guidelines as to —
 - (a) the qualifications for nomination under subregulation (1); and
 - (b) the information to be provided under that subregulation.
- (3) The Director may accept a nomination under subregulation (1) or reject it.
- (4) A nomination is to be regarded as having been accepted unless, within 10 working days after receiving the nomination, the Director notifies the plant operator that the Director has decided to reject the nomination.
- (5) If the Director decides to reject a nomination, the plant operator may make an alternative nomination to the Director in accordance with subregulation (1).
- (6) Notification under subregulation (4) is to be in writing and is to give reasons for the Director's decision.

53. Certification of safety case by nominated auditor

- (1) A safety case submitted under regulation 49 is to be accompanied by a certificate signed by the nominated auditor certifying that —
 - (a) the safety case complies with Schedule 3; and
 - (b) the safety case is appropriate having regard to the size and complexity of the gas plant and the possible risks; and
 - (c) all measures intended —
 - (i) to prevent hazardous events identified in the safety case from occurring; and

- (ii) to protect consumers, the public, employees, plant, equipment and the environment, should such events occur,
are in place; and
 - (d) there are properly trained and equipped personnel available to implement the various procedures set out in the safety case.
- (2) The certificate is to include a summary of the procedures, standards, tests, inspections and maintenance measures contained in the safety case.

54. Assessment and acceptance or rejection of safety case by Director

- (1) The Director must assess a safety case submitted under regulation 49.
- (2) Following an assessment under subregulation (1), the Director may accept the safety case or reject it, and is to notify the plant operator in writing of the decision.
- (3) If the Director has not given notification under subregulation (2) within 20 working days after receiving the safety case (and the accompanying certificate), the safety case is to be regarded as having been accepted.
- (4) Notification under subregulation (2) of the rejection of the safety case is to give —
 - (a) reasons for the rejection; and
 - (b) guidance as to the changes needed to make it acceptable.

55. Rejected safety case to be modified

If the Director rejects a safety case, the plant operator must, within 28 days after receiving notification of its rejection under regulation 54(2) —

- (a) review and modify the safety case; and
- (b) submit the safety case again to the Director.

56. Assessment and acceptance or rejection of modified safety case

- (1) The Director must assess a safety case submitted under regulation 55.
- (2) Following an assessment under subregulation (1), the Director may accept the safety case or reject it, and is to notify the plant operator in writing of the decision.
- (3) If the Director has not given notification under subregulation (2) within 20 working days after receiving the safety case, the safety case is to be regarded as having been accepted.
- (4) Notification under subregulation (2) of the rejection of the safety case is to give reasons for the rejection.

57. Director may determine safety case for gas plant in some cases

- (1) The Director may determine the safety case (the *determined safety case*) that is to apply in respect of a gas plant if —
 - (a) the plant operator fails to submit a safety case under regulation 49 or 55; or
 - (b) the Director rejects a safety case submitted for the gas plant under regulation 55.
- (2) If the Director makes a determination under subregulation (1), the Director is to notify the plant operator in writing of the determination.
- (3) Notification under subregulation (2) is to set out the terms of the determined safety case.
- (4) On notification being given to the plant operator under subregulation (2), the determined safety case is to be regarded for the purposes of this Part as the accepted safety case for the gas plant.

- (5) Nothing in subregulation (4) prevents a plant operator submitting a safety case to the Director under this Part.

58. When accepted safety case has effect

Subject to regulation 63(5), an accepted safety case has effect in relation to a gas plant on and from —

- (a) the day on which notification of the acceptance of the safety case is given under regulation 54(2) or 56(2); or
- (b) the day on which the safety case is to be regarded as having been accepted under regulation 54(3) or 56(3); or
- (c) the day on which notification is given under regulation 57(2),

as the case may be.

59. Gas plant not to be operated without accepted safety case

- (1) A plant operator must not commission or operate a gas plant unless an accepted safety case has effect in relation to the gas plant.
- (2) Subregulation (1) does not apply if the plant operator holds an exemption under regulation 50 and complies with the conditions of the exemption (if any).

60. Accepted safety case, effect of

- (1) In this regulation —
prescribed activity means anything related to the conveyance, control, supply or use of gas done by, for, or with the authority of, a plant operator in the course of the construction, maintenance, repair or operation of any part of a gas plant.
- (2) If an accepted safety case has effect in relation to a gas plant, the plant operator must ensure that a prescribed activity is carried out in such a way as to comply with —
 - (a) any practice or procedure set out in the accepted safety case; and

r. 61

- (b) any provision of a code, standard or specification compliance with which is required under the accepted safety case.

61. Accepted safety case, periodical audit of

- (1) A plant operator must, within one month after the end of each auditing period, lodge with the Director in respect of an accepted safety case a report by a person appointed by the plant operator —
 - (a) certifying that —
 - (i) the measures referred to in regulation 53(1)(c) are still in place; and
 - (ii) there continue to be properly trained and equipped personnel available to implement the various procedures set out in the accepted safety case;
 - and
 - (b) reviewing the accepted safety case for its adequacy and appropriateness having regard to any changes in the gas plant since a report was last lodged under this subregulation; and
 - (c) making recommendations as to the amendments (if any) required to the accepted safety case.
- (2) The person appointed for the purposes of subregulation (1) is to be a person who, in the opinion of the plant operator, is suitably qualified to provide an independent and objective report, but nothing in this subregulation prevents the appointment of an employee of the plant operator.
- (3) In this regulation —

auditing period means —

 - (a) if a report is being lodged under subregulation (1) for the first time in respect of the accepted safety case, a period of 12 months commencing on the day on and from

which the accepted safety case has effect under regulation 58; or

- (b) otherwise, a period of 12 months, or such further period as the Director allows, commencing on the day on which a report was last lodged under subregulation (1) in respect of the accepted safety case.

62. Accepted safety case, amending

- (1) A plant operator may submit amendments to an accepted safety case to the Director for approval.
- (2) If a report under regulation 61 recommends amendments to an accepted safety case, the plant operator must submit amendments consistent with those recommendations to the Director for approval.
- (3) The Director may approve or refuse to approve amendments submitted under subregulation (1) or (2), and is to notify the plant operator in writing of the decision.
- (4) Notification under subregulation (3) of a refusal to approve amendments is to give reasons for the refusal and guidance as to any changes needed to make the amendments acceptable.

63. Director may require accepted safety case to be amended

- (1) If the Director is satisfied that an accepted safety case will no longer produce a safe outcome, the Director may, by notice in writing, require the plant operator to make specified amendments to the accepted safety case within a specified period.
- (2) A plant operator must comply with a requirement under subregulation (1) within the specified period.
- (3) If a plant operator contravenes subregulation (2), the Director may, by notice in writing, suspend the operation of the accepted safety case with effect from the specified day until the requirement is complied with.

r. 64

- (4) Before giving notice under subregulation (3), the Director is to give the plant operator a reasonable opportunity to make submissions in relation to the day to be specified in the notice for the purposes of that subregulation.
- (5) An accepted safety case does not have effect for the period of any suspension under subregulation (3).
- (6) In subregulations (1), (2) and (3) —
specified means specified in the notice concerned.

64. Records about accepted safety case, plant operator's duties as to

- (1) A plant operator must establish and maintain a system for keeping records required to be kept under subregulation (2) in relation to an accepted safety case.
- (2) The records required to be kept are copies of —
 - (a) the accepted safety case; and
 - (b) any amendment of the accepted safety case; and
 - (c) the certificate under regulation 53(1); and
 - (d) each report in respect of the accepted safety case under regulation 61.
- (3) The plant operator must ensure that the records are kept —
 - (a) at the address nominated by the plant operator in the accepted safety case; and
 - (b) in a manner that makes their retrieval reasonably practicable; and
 - (c) in a secure manner.
- (4) The plant operator must ensure that each of the records is kept for a period of 5 years after its creation.

Part 6 — Review of decisions

65. Terms used

In this Part —

application for review means an application made under regulation 67(1);

review panel means a panel mentioned in regulation 68.

66. Decisions to which this Part applies

This Part applies to a decision of the Director —

- (a) to refuse approval under regulation 17(1); or
- (aa) to request that a management plan be amended under regulation 17E(1); or
- (ab) to refuse to approve a management plan under regulation 17E(5); or
- (ac) to request that an amendment or replacement be amended under regulation 17F(3); or
- (ad) to refuse to approve an amendment or replacement under regulation 17F(3); or
- (ae) to refuse to approve an amendment or replacement under regulation 17F(7); or
- (af) to direct a network operator or pipeline operator to amend an approved plan under regulation 17G(2); or
- (b) to refuse approval of a standard or code submitted under regulation 19(2); or
- (c) to refuse to grant an exemption under regulation 28(1) or 50(1); or
- (d) to revoke an exemption under regulation 28(1) or 50(1); or
- (e) to impose, vary or revoke a condition under regulation 28(2) or 50(2); or

- (f) to reject a nomination under regulation 30(3) or 52(3);
or
- (g) to refuse approval of a safety case under
regulation 32(2); or
- (h) to reject a safety case under regulation 34(1) or 56(2); or
- (i) to refuse approval of an amendment submitted under
regulation 39(1) or (2) or 62(1) or (2); or
- (j) to impose a requirement under regulation 40(1) or 63(1).

[Regulation 66 amended in Gazette 4 Jan 2008 p. 14.]

67. Review by Director, application for

- (1) A person who is aggrieved by a decision to which this Part applies may apply in writing to the Director for a review of the decision.
- (2) An application for review is to be made within 14 days after the applicant receives notice of the decision or within such further period as the Director in a particular case allows.

68. Review panel, Director may convene

The Director may convene a panel of 3 independent professional engineers to advise the Director in relation to an application for review.

69. Procedure on review

- (1) The Director must give the applicant a reasonable opportunity to make submissions in relation to the application for review.
- (2) The operation of a decision is not affected by an application for review unless, on application made by the applicant, the Director determines otherwise.
- (3) The Director, after considering submissions (if any) made under subregulation (1) and, if a review panel is convened, the

recommendations (if any) made by the panel, may determine the application by —

- (a) confirming the decision; or
- (b) varying the decision; or
- (c) reversing the decision,

and the determination of the Director is final.

- (4) The Director must give written notice of his or her determination to the applicant.
- (5) If a review panel is convened, the notice under subregulation (4) is to set out the recommendations (if any) made by the panel.
- (6) The Director may publicise his or her determination in such manner as the Director thinks fit.

70. Costs

- (1) If the Director confirms the decision under regulation 69(3)(a), the applicant is liable to pay the reasonable costs of the review.
- (2) Any costs payable by the applicant under subregulation (1) are recoverable by the Director in a court of competent jurisdiction as a debt due to the State.

[Part 7 (r. 71) omitted under the Reprints Act 1984 s. 7(4)(f).]

Schedule 1 — Odorant levels for various gases and types of odorant

[r. 6(c), 9(c)]

[Heading inserted in Gazette 8 Jan 2010 p. 16.]

Odorant type	Application	Minimum TBM (mg/m³)	Minimum total (mg/m³)	Maximum total (mg/m³)
Mainly tertiary butyl mercaptan (TBM)	Natural gas: industrial	3	4	15
Mainly tertiary butyl mercaptan (TBM)	Natural gas: general	6	8	30
Mainly tetra hydro thiophene (THT)	Natural gas: industrial	2	8	20
Mainly tetra hydro thiophene (THT)	Natural gas: general	3	12	30
Ethyl mercaptan	Liquefied petroleum gas: reticulated	Not applicable	20	100

[Schedule 1 inserted in Gazette 8 Jan 2010 p. 16; amended in Gazette 15 Oct 2010 p. 5174.]

[Schedule 2 deleted in Gazette 8 Jan 2010 p. 16.]

Schedule 3 — Requirements for gas plant safety case

[r. 49(2)]

Part 1 — Preliminary

1. Term used: gas incident

In this Schedule —

gas incident means any incident or event relating to the conveyance, control, supply or use of gas that causes or has the potential to cause —

- (a) the death of or injury to a person; or
- (b) significant damage to property; or
- (c) an explosion.

2. Performance standards, requirement as to

If this Schedule requires a safety case to specify a performance standard in relation to an activity, that standard must be one that specifies —

- (a) who is responsible for carrying out the activity; and
- (b) what has to be done in the performance of the activity; and
- (c) when the activity has to be performed; and
- (d) the expected outcome of the activity.

Part 2 — Content of safety case

3. Manager etc. of gas plant to be specified

A safety case must specify the title of the position, and the business address, of —

- (a) a person who has management or control of the gas plant; and
- (b) a person who has general responsibility for the safe operation of the gas plant.

4. Person responsible for safety case etc. to be specified

A safety case —

- (a) must specify the title of the position of a person who is responsible for preparation and submission of the safety case; and
- (b) may specify the titles of the positions of any other persons who are responsible for or contributed to the preparation and submission of any part of the safety case.

5. Plant description, requirements as to

- (1) A safety case must contain a plant description.
- (2) The plant description must provide a description of the structure, assets, function and operation of the gas plant to which the safety case relates.
- (3) The plant description must provide sufficient information (including plans and diagrams showing the layout and nature of the gas plant) to enable —
 - (a) the extent and scope of the assets and operations of the plant operator in relation to the gas plant; and
 - (b) the risks associated with those assets and operations,to be assessed.

6. Formal safety assessment, requirements as to

- (1) A safety case must contain a formal safety assessment for the gas plant.
- (2) The formal safety assessment must be consistent with the plant description and must provide —
 - (a) a description of the methodology used and investigations undertaken for the formal safety assessment; and
 - (b) an identification of all hazards having the potential to cause a gas incident; and
 - (c) a detailed and systematic assessment of risk, including the likelihood and consequences of a gas incident; and

- (d) a description of technical and other measures undertaken, or to be undertaken, to reduce that risk as far as is practicable.
- (3) The formal safety assessment must include copies of any reports arising from the studies and investigations undertaken for the purposes of the formal safety assessment.

7. Safety management system to be specified

A safety case must specify, in accordance with Part 3, the safety management system followed or to be followed in relation to the gas plant.

8. Gas incidents, procedure for reporting to be specified

A safety case must specify the procedures to be followed by the plant operator for the reporting of gas incidents in relation to the gas plant.

9. Address where records kept to be specified

A safety case must specify the address at which all records relating to the safety case are to be kept.

Part 3 — Content of safety management system

10. Safety policy, requirements as to

A safety management system must specify —

- (a) the plant operator's safety policy; and
- (b) the title of the position of the person responsible for determining the safety policy; and
- (c) the means by which the safety policy is or is to be communicated to all persons required to implement the policy.

11. Organisational structure and responsibilities to be specified

A safety management system must specify the titles of the positions and the duties of the persons responsible for the implementation of the safety policy.

12. Published technical codes etc. which will apply to be specified

A safety management system must specify all published technical codes, standards or specifications applied to or used or to be used in the design, construction, installation and operation of the gas plant.

13. Means of ensuring adequacy of design, construction etc.

A safety management system must specify the means used or to be used by the plant operator to ensure that the design, construction, installation, operation and maintenance of the gas plant and any modification of the gas plant —

- (a) are adequate for the safety and safe operation of the gas plant; and
- (b) provide adequate means of achieving isolation of the gas plant or any part of the gas plant in the event of an emergency; and
- (c) provide adequate means of gaining access for servicing and maintenance of the gas plant and machinery and other equipment; and
- (d) provide adequate means of maintaining the structure and operation of the gas plant; and
- (e) take into account the results of the formal safety assessment for the gas plant.

14. Control systems which will be used to be specified

- (1) A safety management system must specify the control systems to be used for the gas plant including —
 - (a) alarm systems; and
 - (b) fire and gas detection and protection systems; and
 - (c) temperature and pressure control systems; and
 - (d) emergency shut-down systems.
- (2) The control systems specified must be adequate for the normal operation of the gas plant and for any reasonably foreseeable emergency.

15. Critical equipment etc. to be specified

A safety management system must, where relevant specify —

- (a) the critical equipment (including process equipment, machinery and electrical and instrumentation systems) that relates to, or may affect, the safety of the gas plant; and
- (b) the systems in place to ensure that the equipment is fit for the purpose —
 - (i) for which it is used in normal operating conditions; and
 - (ii) to the extent that it is intended to function, or be used, in an emergency.

16. Response plan for emergencies to be specified

- (1) A safety management system must specify a response plan designed to address all reasonably foreseeable gas related emergencies that have been identified through the formal safety assessment.
- (2) The response plan must —
 - (a) ensure the safety of the public; and
 - (b) specify the performance standards to be used to ensure the continued safe operation and structural safety of the gas plant.

17. Emergency communications systems to be specified

- (1) A safety management system must specify communications systems that, in the event of an emergency, are adequate for communication —
 - (a) within the gas plant; and
 - (b) with the relevant fire authorities and emergency service authorities.
- (2) In particular, a safety management system must provide for the communications systems to be —
 - (a) adequate to handle —
 - (i) a likely emergency in, or relating to, the gas plant; and
 - (ii) the normal operational requirements of the gas plant; and

- (b) protected so as to be capable of operation in an emergency to the extent specified by the formal safety assessment for the gas plant.

18. Internal monitoring etc. processes etc. to be specified

- (1) A safety management system must specify the work practices or processes to be used by the plant operator for monitoring, auditing and reviewing the implementation of the safety policies, objectives, procedures and performance standards specified in the safety management system.
- (2) A safety management system must specify the procedures to be used to ensure the ongoing effectiveness of the work practices or processes specified under subclause (1) being procedures that enable —
 - (a) regular and systematic identification of deficiencies in those work practices or processes; and
 - (b) regular and systematic improvement of those work practices or processes.

19. Gas incidents, performance standards for recording etc. to be specified

A safety management system must specify —

- (a) the performance standards to be used for recording and investigating gas incidents; and
- (b) the management systems to be used for reviewing and taking action on the information so recorded or arising from those investigations.

20. Staff skills etc., systems to ensure to be specified

- (1) A safety management system must specify the work and staffing systems to be used in relation to the gas plant to ensure, as far as is practicable, that —
 - (a) each area of safety critical work in relation to the gas plant is assessed to identify the minimum skills, knowledge and experience requirements for a person assigned to carry out that work; and

- (b) only persons with the skills, knowledge and experience appropriate to an area of safety critical work are assigned to carry out that work; and
 - (c) any training necessary for persons assigned to carry out safety critical work is provided.
- (2) In subclause (1) —
- safety critical work*** means anything related to the conveyance, control, supply or use of gas that —
- (a) is done by, for, or with the authority of, a plant operator in the course of the construction, maintenance, repair or operation of any part of a gas plant; and
 - (b) may affect the safety of the gas plant.

Schedule 4 — Sub-networks

[r. 17A]

[Heading inserted in Gazette 4 Jan 2008 p. 15.]

Each of the following parts of the distribution system the subject of distribution licence GDL 8 under the *Energy Coordination Act 1994* is a sub-network —

- (a) Geraldton (Nangetty Road);
- (b) Eneabba;
- (c) Muchea;
- (d) Ellenbrook;
- (e) Metro North;
- (f) Metro South;
- (g) Barter Road, Naval Base;
- (h) Rockingham;
- (i) Pinjarra;
- (j) Oakley Road (Pinjarra);
- (k) Harvey;
- (l) Kemerton;
- (m) Clifton Road, Bunbury.

[Schedule 4 inserted in Gazette 4 Jan 2008 p. 15.]

Notes

¹ This reprint is a compilation as at 4 May 2012 of the *Gas Standards (Gas Supply and System Safety) Regulations 2000* and includes the amendments made by the other written laws referred to in the following table. The table also contains information about any reprint.

Compilation table

Citation	Gazettal	Commencement
<i>Gas Standards (Gas Supply and System Safety) Regulations 2000</i>	4 Jul 2000 p. 3475-540	1 Aug 2000 (see r. 2)
<i>Gas Standards (Gas Supply and System Safety) Amendment Regulations 2000</i>	5 Sep 2000 p. 5053	5 Sep 2000
<i>Gas Standards (Gas Supply and System Safety) Amendment Regulations 2001</i>	3 Aug 2001 p. 3969	3 Aug 2001
<i>Gas Standards (Gas Supply and System Safety) Amendment Regulations 2007</i>	4 Jan 2008 p. 3-15	r. 1 and 2: 4 Jan 2008 (see r. 2(a)); Regulations other than r. 1 and 2: 5 Jan 2008 (see r. 2(b))
Reprint 1: The Gas Standards (Gas Supply and System Safety) Regulations 2000 as at 11 Apr 2008 (includes amendments listed above)		
<i>Gas Standards (Gas Supply and System Safety) Amendment Regulations 2009</i>	6 Nov 2009 p. 4468-9	r. 1 and 2: 6 Nov 2009 (see r. 2(a)); Regulations other than r. 1 and 2: 7 Nov 2009 (see r. 2(b))
<i>Gas Standards (Gas Supply and System Safety) Amendment Regulations (No. 2) 2009</i>	8 Jan 2010 p. 10-16 (as amended 15 Oct 2010 p. 5175 and 31 Dec 2010 p. 6893)	r. 1 and 2: 8 Jan 2010 (see r. 2(a)); Regulations other than r. 1, 2, 4(5), 11-13, 14(1) and (3) and 18: 9 Jan 2010 (see r. 2(d)); r. 11-13, 14(1) and (3) and 18: 3 Aug 2011 (see r. 2(c) and <i>Gazette</i> 31 Dec 2010 p. 6892-3); r. 4(5): 1 Jan 2012 (see r. 2(b))
<i>Gas Standards (Gas Supply and System Safety) Amendment Regulations 2010 Pt. 2</i>	15 Oct 2010 p. 5172-5	16 Oct 2010 (see r. 2(b))
Reprint 2: The Gas Standards (Gas Supply and System Safety) Regulations 2000 as at 4 May 2012 (includes amendments listed above)		

Defined terms

[This is a list of terms defined and the provisions where they are defined.

The list is not part of the law.]

Defined term	Provision(s)
accepted safety case	3(1)
application for review	65
approved plan.....	17A
AS	3(1)
AS/NZS.....	3(1)
auditing period	38(3), 61(3)
badged capacity.....	3(1)
commencement	14
contractor	23(1)
corporation.....	17A
cubic metre.....	3(1)
determined heating value	17A
determined safety case	57(1)
distribution system.....	3(1)
emergency.....	17A
employee.....	3(1), 23(1)
existing operator	17D(1)
flow weighted average higher heating value.....	17A
former distribution system	24(1)
FWAHHV	17A
gas day	17A
gas incident	42, Sch. 3 cl. 1
gas operations	17D(1)
gas plant	3(1)
HHV zone	17A
higher heating value	3(1)
implementation day.....	3(1)
implementation period	17A
implementation plan.....	31(1)
ISO.....	3(1)
leanest supplied higher heating value	17A
lower heating value	3(1)
LPG.....	3(1)
LSHHV	17A
m3	3(1)
major activity	22(1)
major discharge.....	42
management plan	17A
master meter.....	3(1)

meter	3(1)
natural gas	3(1)
network operator	3(1)
new operator	17D(1)
nominated auditor	3(1)
notifiable incident	42
officer.....	17A
permitted range	17A
plant operator	3(1)
prescribed activity.....	3(1), 60(1)
prescribed pressure	4(1)
private property.....	42
quarter	3(1)
relevant day.....	17D(1)
retail market scheme	17A
review panel	65
safety case	3(1)
safety critical work.....	Sch. 3 cl. 20(2)
serious damage.....	42
serious injury.....	42
simulated natural gas.....	4(1)
specified	40(6), 63(6)
sub-network	17A
tempered LPG	4(1)
utilised.....	3(1)