

HEALTH AND SAFETY IN EMPLOYMENT (PIPELINES) REGULATIONS 1999

MICHAEL HARDIE BOYS, Governor-General

ORDER IN COUNCIL

At Wellington this 11th day of October 1999

Present:

THE RIGHT HON JENNY SHIPLEY PRESIDING IN COUNCIL

PURSUANT to section 21 of the Health and Safety in Employment Act 1992, His Excellency the Governor-General, acting by and with the advice and consent of the Executive Council, makes the following regulations.

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REGULATIONS

1. Title and commencement—(1) These regulations may be cited as the Health and Safety in Employment (Pipelines) Regulations 1999.

(2) These regulations come into force on the 28th day after the date of

their notification in the Gazette.

Preliminary

2. Interpretation—In these regulations, unless the context otherwise requires,—

"The Act" means the Health and Safety in Employment Act 1992:

"Certificate of fitness" means a certificate of fitness of the kind referred to in regulation 11 and issued under these regulations by a certifying authority:

"Certifying authority" means a person or organisation recognised by

the Secretary under regulation 9:

"Geothermal fluid" means all steam, water, and water vapour, and every mixture of all or any of them (which mixture may include gases), that has been heated within the earth by natural phenomena to a temperature in excess of 70°C or more:

"Manager" means a person appointed under regulation 5:

"Natural gas"-

(a) Means—

- (i) Any naturally occurring gaseous hydrocarbon; or
- (ii) Any mixture of naturally occurring gaseous hydrocarbons; or
- (iii) Any other naturally occurring substance that is in a gaseous state at a temperature of 15°C and an absolute pressure of 101.325 kP and that is recovered by mining; and
- (b) Includes Liquified Petroleum Gas:

"Oil" means any alcohol or hydrocarbon other than coal, natural gas, or gas as defined in the Gas Act 1992:

"Petroleum"—

- (a) Means—
 - (i) Any naturally occurring hydrocarbon (other than coal) whether in a gaseous, liquid, or solid state; or
 - (ii) Any naturally occurring mixture of hydrocarbons (other than coal) whether in a gaseous, liquid, or solid state; or
 - (iii) Any naturally occurring mixture of 1 or more hydrocarbons (other than coal), whether in a gaseous, liquid, or solid state, and 1 or more of the following,

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namely, carbon dioxide, helium, hydrogen sulphide, or nitrogen; and

- (b) Includes—
 - (i) Any petroleum that has been mined or otherwise recovered from its natural condition; or
 - (ii) Any petroleum that has been mined or otherwise recovered but has been returned to a natural reservoir for storage purposes in the same or an adjacent area:

"Pipeline"—

- (a) Means—
 - (i) Any pipeline that was authorised under the Petroleum Act 1937; or
 - (ii) Any pipeline or proposed pipeline likely to be permanent and used or intended to be used for the conveyance of any mineral, petroleum, geothermal fluid, natural gas, or any other fluid that, at ambient conditions, has inherent properties that may create a significant hazard; and
- (b) Includes any part of a pipeline or proposed pipeline, including—
 - (i) Any directly associated fitting, pig launcher, or receiver; and
 - (ii) Any pressure vessel and its associated appurtenances, including any compressor, filter, separator, coalescer, or pulsation bottle; and
 - (iii) Any natural gas cooler associated with any pipeline compressor, pump, or tank; and
 - (iv) Any appurtenance required for the conveyance of the product or material in the pipeline or for its safe operation; but
 - (c) Does not include—
 - (i) Any bulk storage installation; or
 - (ii) Any pipeline wholly within the boundary of the plant that the pipeline is servicing; or
 - (iii) Any pipeline between a bulk storage installation and another form of transport that is not an extension of a pipeline as defined in these regulations; or
 - (iv) Any pipeline with a pressure of 2000 kP gauge or less under the control of a gas distributor and used to distribute gas from the boundary of the gasworks or gate station or outlet flange supplying gas for distribution; or
 - (v) Any pipeline or part of a pipeline offshore that forms part of an offshore petroleum operation; or
 - (vi) Any pipeline 150 mm in diameter or less that is not associated with the production of electricity and that contains geothermal fluids; or
 - (vii) Any pipelines solely used for the purposes of conveying water:
- "Pipeline operation" means any work in connection with a pipeline, including its design, construction, operation, maintenance, and abandonment:

"Pipeline worker"—

(a) Means any person employed or engaged in any capacity in or around a pipeline operation; and

(b) Includes any contractor or subcontractor engaged to carry out any work relating to the operation, and the employees of any such contractor or subcontractor.

3. Meaning of "employer" and "employee"—(1) In these regulations, "employer" includes—

(a) A person who controls a place of work; and

(b) A principal who controls a place of work at which a contractor or subcontractor works.

(2) In these regulations, "employee",-

- (a) In relation to a person who controls a place of work, means a person lawfully at work in the place; and
- (b) In relation to a principal, means an employee of a contractor or subcontractor or, if a contractor or subcontractor is an individual, the contractor or subcontractor, being an employee, contractor, or subcontractor doing work (other than residential work) that the contractor was engaged to do.
- **4. Relationship between Act and regulations**—A person on whom a duty is imposed by these regulations in relation to a particular set of circumstances must, on the occurrence of those circumstances, comply with that duty, despite the fact that the Act may impose the same, a similar, or an additional duty on that person in relation to that set of circumstances.

Managers

5. Managers to be appointed to exercise supervision—(1) An employer must take all practicable steps to ensure that a person is appointed to—

(a) Manage the pipeline operation; and

(b) Supervise the health and safety aspects of the pipeline operation personally on every day on which any employee is at work.

(2) An employer must take all practicable steps to ensure that every manager appointed under this regulation has the experience, knowledge, and skills necessary to supervise the pipeline operation.

(3) An employer must take all practicable steps to ensure that all

employees are informed of the name of the manager.

(4) Employees must comply with all reasonable instructions given by the manager in order to ensure compliance with the Act and any applicable regulations made under the Act.

General Duties

- **6. Management of hazardous liquids, vapours, and gases**—An employer must take all practicable steps to—
 - (a) Prevent the uncontrolled release of hazardous liquids, vapours, and gases; and
 - (b) Prevent the uncontrolled accumulation of hazardous vapours and gases; and
 - (c) Detect any hazardous accumulation of vapours or gases; and

- (d) Protect pipeline workers working in areas where hazardous liquids, vapours, or gases may exist, particularly in confined spaces.
- **7. Identification and location of pipelines**—An employer must take all practicable steps to ensure that the location of any pipeline is clearly identifiable to the controlling authorities, and to any users, of any land that the pipeline may pass through, on, or under.
- **8. Design, construction, operation, maintenance, suspension, and abandonment standards**—(1) Subject to subclause (2), an employer must take all practicable steps to ensure that the pipeline operation is designed, constructed, operated, and maintained, and suspended or abandoned (as the case may be), in accordance with the appropriate part or parts of—
 - (a) NZS/AS 2885, Pipelines-Gas and Liquid Petrc.eum, comprising—
 - (i) 2885 1 Part 1: Design and Construction, 1997; and
 - (ii) 2885 2 Part 2: Welding, 1995; and
 - (iii) 2885 3 Part 3: Operation and Maintenance, 1997; or
 - (b) NZS 5223, Code of Practice for High Pressure Gas and Petroleum Liquids Pipelines 1987; or
 - (c) The provisions of ANSI B 31, American National Standards Institute Code for Pressure Piping, comprising—
 - (i) ASME B 31.3:1999, Chemical Plant and Petroleum Refinery Piping, 1990; and
 - (ii) ASME B 31.4:1998, Liquid Transportation Systems for Hydrocarbons, Liquid Petroleum Gas, Anhydrous Ammonia, and Alcohols, 1989; and
 - (iii) ASME B 31.8:1995, Gas Transmission and Distribution Systems, 1989; or
 - (d) The Institute of Petroleum Pipeline Safety Code (IP Part 6), 1982.
- (2) If the documents referred to in subclause (1) are not applicable to any part of the pipeline operation, the employer must take all practicable steps to ensure that that part of the pipeline operation is designed, constructed, operated, and maintained, and suspended or abandoned (as the case may be), in accordance with generally accepted and appropriate industry practice.

Provisions Relating to Certification

- **9. Recognition of certifying authorities**—(1) The Secretary may recognise a person or organisation as a certifying authority, if satisfied that—
 - (a) The person or organisation operates an effective and relevant quality assurance programme; and
 - (b) The person or organisation has appropriate experience and background relevant to the certification work; and
 - (c) The person or organisation is currently accredited, to a recognised industry standard, by International Accreditation New Zealand on behalf of the Testing Laboratory Registration Council or by the National Association of Testing Authorities, Australia; and
 - (d) The person or organisation is likely to carry out its inspection work in an objective fashion that promotes safety and the public interest; and

- (e) There is no reasonably foreseeable conflict of interest between the person or organisation's design verification work, inspection work, and any other work the person or organisation does or is likely to do.
- (2) Recognition of any person or organisation as a certifying authority is subject to the following conditions:
 - (a) That any certificate of fitness issued by the certifying authority is in the form specified in Schedule 1:
 - (b) That any certificate of fitness issued by the certifying authority contains the date on which the certificate expires, which is to be no longer than 5 years from the date of issue of the certificate:
 - (c) Any other conditions from time to time prescribed by the Secretary in the *Gazette* on the ground that it is in the interests of safety to do so.
- (3) The Secretary may withdraw recognition of a certifying authority if the Secretary is satisfied that—
 - (a) It is appropriate to do so; or
 - (b) The certifying authority no longer complies with any provision of subclause (1) or is not complying with any condition imposed by or under subclause (2).
- (4) Before withdrawing recognition of a certifying authority, the Secretary must put his or her concerns to the certifying authority and consider the certifying authority's response.
- (5) If the Secretary has recognised any person or organisation under this regulation, or withdrawn recognition from any person or organisation, the Secretary must publish a notice to that effect in the *Gazette*.

10. Certifying authority to carry out inspections and issue certificates of fitness—(1) A certifying authority must—

- (a) Carry out such inspections or examinations of pipelines, and equipment fixed to or associated with pipelines, as may be necessary to determine the safety of such pipelines and equipment; and
- (b) Issue certificates of fitness in respect of the safety of the structure of pipelines and other equipment necessary for the safe operation of the pipelines; and
- (c) Impose limitations or conditions under regulation 11 (5), if the pipelines or equipment no longer complies with the relevant certificate of fitness.
- (2) In issuing a certificate of fitness for any pipeline, a certifying authority may consider the conditions of authorisation of the pipeline (if any).
- 11. Compliance with certificates of fitness—(1) An employer must take all practicable steps to ensure that a pipeline is not operated unless there is a current certificate of fitness in respect of—
 - (a) The pipeline; and
 - (b) All equipment necessary for the safe operation of the pipeline.
- (2) The matters referred to in subclause (1) (a) and (b) may be covered by 1 certificate, if appropriate.

- (3) An employer must take all practicable steps to ensure that a copy of any certificate of fitness is provided to the Secretary before the pipeline is operated.
- (4) The pipeline or equipment no longer complies with the relevant certificate of fitness if it—

(a) Sustains damage; or

(b) Shows signs of deterioration that could affect the integrity of the pipeline or equipment; or

(c) Is structurally modified or replaced.

- (5) If the pipeline or equipment no longer complies with the relevant certificate of fitness,—
 - (a) The employer must cease to operate that pipeline or equipment unless the certifying authority allows such operation under paragraph (b):
 - (b) The certifying authority may allow the employer to continue to operate that pipeline or equipment in accordance with such reasonable limitations and conditions as it notifies to the employer in writing, and—

(i) The certificate of fitness is subject to those limitations and

conditions; and

- (ii) The employer may continue to operate the pipeline or equipment only within those limitations or conditions (if any):
- (c) The certifying authority must in each case endorse on the certificate of fitness—

(i) The reason or reasons for non-compliance; and

- (ii) Any limitations and conditions imposed under this subclause.
- (6) An employer must take all practicable steps to ensure that every pipeline in existence at the date of commencement of these regulations complies with this regulation within 18 months after that date.

Notifiable Operations

- 12. Notification of certain operations—(1) No employer may commence the construction, operation, or abandonment of a pipeline operation unless the Secretary has first been notified in writing of—
 - (a) The nature of that work; and
 - (b) The time when the employer intends to commence that work.
- (2) The notification must contain the particulars set out in Parts 1 and 2 (as appropriate) of Schedule 2.
- (3) An employer must take all practicable steps to ensure that the Secretary is notified at least 20 days before the day on which the employer intends to commence the construction, operation, or abandonment of the pipeline operation.
- (4) If any material alteration occurs in respect of the particulars supplied under subclause (2), an employer must take all practicable steps to ensure that the Secretary is notified in writing of the alteration as soon as practicable after the date of the alteration.
- (5) An employer must take all practicable steps to ensure that the construction, operation, or abandonment of the pipeline operation is carried out in a manner that is consistent with the notification.
- (6) Within 6 months after a pipeline begins operating, the employer must confirm to the Secretary the notification details supplied to the

Secretary under subclause (1), together with such additions and other amendments as may be necessary.

- 13. Other notifications—(1) If a hydrostatic test is to be carried out, an employer must take all practicable steps to ensure that the Secretary is given at least 8 days' notice of the likely date and location of the proposed hydrostatic test.
- (2) An employer must take all practicable steps to ensure that the Secretary is notified as soon as practicable of any fault, damage, or incident in relation to the pipeline that has caused or might have caused serious harm to pipeline workers or to other people in the vicinity of the pipeline.

Duties Relating to Land Occupiers and Controlling Authorities

14. Abandonment of pipeline operation—An employer must take all practicable steps to ensure that no hazard is created when a pipeline operation is being abandoned.

15. Notification to land occupiers or controlling authorities—

- (1) An employer must take all practicable steps to notify any occupier or controlling authority of any piece of land through, on, or under which a pipeline passes, of—
 - (a) The name and relevant contact details of the person who may be contacted in respect of any matter relating to the pipeline; and
 - (b) The hazards likely to be involved in respect of any work near the pipeline.
- (2) Notification under subclause (1) must be made as soon as practicable after any change of details in respect of the person to be notified under this regulation, and in any event at least annually.

16. Work which might adversely affect pipelines—(1) An employer must—

- (a) Take all practicable steps to ensure that any work on, in, or around a pipeline is undertaken in such a manner as to minimise any significant hazards that may arise; and
- (b) Ensure that, before work is undertaken, the manager is notified of those activities specified in subclause (4) that are likely to adversely affect the structural integrity or operation of any pipeline and create a significant hazard.
- (2) A pipeline worker must take all practicable steps to ensure that any work on, in, or around a pipeline is undertaken in such a manner as to minimise any significant hazards that may arise.
- (3) An employee must ensure that, before work is undertaken, the manager is notified of those activities specified in subclause (4) that are likely to adversely affect the structural integrity or operation of any pipeline and create a significant hazard.
 - (4) The activities concerned are—
 - (a) Blasting:
 - (b) Excavation or other land disturbance:
 - (c) Placing of trees or plants:
 - (d) Placing of any matter or thing on or in any land:
 - (e) Loading of the soil:

- (f) Passage of any heavy vehicles or heavy machinery.
- 17. Emergency procedures—(1) A principal, and any other person, who controls a place of work must take all practicable steps to develop procedures for dealing with emergencies that may arise while employees are at work.
 - (2) The procedures include—
 - (a) Identifying the person or persons responsible for instructing pipeline workers in the emergency procedures; and
 - (b) Ensuring that a copy of the emergency procedures is sent to the Secretary before commencement of the pipeline operation; and
 - (c) Reviewing the emergency procedures from time to time to ensure that they remain adequate; and
 - (d) Ensuring that any revision of emergency procedures is provided to the Secretary as soon as practicable after the revision is made.
- (3) The principal or other person must ensure that a copy of the procedures is provided to the Secretary as soon as practicable after they have been developed.

Revocation

18. Revocation—The Petroleum Pipelines Regulations 1984* are revoked.

Offences

- **19. Offences**—(1) The provisions to which this regulation applies are regulations 5, 6, 7, 8, 11 (1), 11 (3), 11 (5), 12 (1), 12 (3), 12 (4), 12 (5), 12 (6), 13, 14, 15, 16, 17 (1), and 17 (3).
- (2) Section 50 of the Act (which provides that every person who fails to comply with a provision to which that section is declared to apply commits an offence and is liable on summary conviction to a fine) applies to the provisions of these regulations referred to in subclause (1).

*S.R. 1984/114

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SCHEDULES

SCHEDULE 1

Reg. 9 (2) (a)

FORM OF CERTIFICATE OF FITNESS

[Name or description	of pipeline]	
have been designed suspended or abandor accepted and appropria	l, constructed, operated ted, as indicated below, in	above-mentioned pipeline d, and maintained, and accordance with generally s indicated by compliance s of practice specified:
Part [description]	Code of practice	Action*
The following parts of limitations:	of the above-mentioned p	ipeline have the following
Part [description]		Limitations
	e, on the date on which tl	for, in respect of nat part no longer complies
Signed[Certifying authority]	Date	
		nised by the Secretary of the Gazette of [Year], at

 $^{\circ}$ List whether it has been Designed (D), Constructed (C), Operated (O), Maintained (M), Abandoned (A).

Reg. 12 (2)

SCHEDULE 2

PARTICULARS TO BE NOTIFIED TO SECRETARY

PART 1

PARTICULARS REQUIRED TO BE NOTIFIED TO SECRETARY BEFORE CONSTRUCTION OR OPERATION OF PIPELINE

- 1. The name and address of every employer, and of any manager appointed under regulation 5.
 - 2. The material to be transported in the pipeline.
 - 3. The route of the pipeline and its terminal points.
- 4. The proposed location of fittings, pumps, tanks, and appurtenances, that are intended to be directly associated with the operation of the pipeline.
- 5. The proposed codes of practice or codes for pipeline design, construction, operation, maintenance, and testing.
 - 6. The size, length, and maximum working pressure of the pipeline.
- 7. The proposed nominal outside diameter and nominal wall thickness of the pipe, and the strength grade of the material of which the pipe is made.
- 8. Copies of hydrostatic test records, including calibration certificates for pressure testing equipment and originals of field data sheets.
 - 9. The proposed maximum and minimum hydrostatic test pressures.
- 10. Details of any likely adverse effects of the terrain on or adjacent to the proposed route of the pipeline and any means by which the likely effects are to be monitored or controlled.
 - 11. A plan, in an appropriate form and scale, showing—
 - (a) The surveyed and pegged route proposed for the pipeline; and
 - (b) The extent to which the pipeline may be placed through, on, or under any road, railway, water, or other artificially imposed landscape feature any part of which is within 5 m of the centreline of the pipeline; and
 - (c) The proposed location of block valves, and shut-off valves, of stations for reducing or increasing pressure; and
 - (d) The location of any other pipelines, utilities, or storage facilities, that are likely to contain significant amounts of potentially hazardous fluids and that are located within 25 m of the centreline of the pipeline.

PART 2

PARTICULARS REQUIRED TO BE NOTIFIED TO SECRETARY BEFORE ABANDONMENT OF PIPELINE

- 1. The name and address of every employer, and of any manager appointed under regulation 5.
 - 2. The estimated date of abandonment.
 - 3. Details of depressurisation, purging, cleaning, and sealing.
 - 4. Details of changes to any existing cathodic protection system.

SCHEDULE 2—continued

PARTICULARS TO BE NOTIFIED TO SECRETARY—continued

PART 2—continued

PARTICULARS REQUIRED TO BE NOTIFIED TO SECRETARY BEFORE ABANDONMENT OF PIPELINE—continued

5. Details as to the practicable steps to be taken to ensure no hazard is created when a pipeline is abandoned.

MARIE SHROFF, Clerk of the Executive Council.

EXPLANATORY NOTE

This note is not part of the regulations, but is intended to indicate their general effect.

These regulations, which come into force on the 28th day after the date of their notification in the *Gazette*, deal with matters relating to health and safety in the operation of pipelines.

Regulations 2 to 4 define certain terms used in the regulations.

Regulation 5 requires employers to appoint managers to manage pipeline operations and supervise health and safety aspects of the operations.

Regulations 6 to 8 outline an employer's general duties. These include the management of hazardous liquids, vapours, and gases.

Regulations 9 to 11 contain provisions relating to certification. The functions of a certifying authority, and the requirements concerning certificates of fitness, are specified.

Regulations 12 and 13 deal with the notification of certain operations.

Regulations 14 to 17 impose duties on employers in relation to land occupiers and controlling authorities, and provide for emergency procedures.

Issued under the authority of the Acts and Regulations Publication Act 1989. Date of notification in *Gazette:* 14 October 1999. These regulations are administered in the Department of Labour.