



Queensland

# **Petroleum and Gas (Production and Safety) and Other Legislation Amendment Regulation (No. 1) 2005**

**Explanatory Notes for SL 2005 No. 300**

made under the

*Coal Mining Safety and Health Act 1999*

*Petroleum and Gas (Production and Safety) Act 2004*

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## **General Outline**

### **Short title**

*Petroleum and Gas (Production and Safety) and Other Legislation Amendment Regulation (No. 1) 2005.*

### **Authorising law**

*Petroleum and Gas (Production and Safety) Act 2004*

*Coal Mining Safety and Health Act 1999*

### **Objective of the legislation**

To provide an effective and efficient regulatory system for the petroleum and pipeline industries in Queensland and to address safety and technical issues related to production, transportation and use of petroleum, coal seam gas and fuel gas.

## **Reasons for the subordinate legislation**

The Regulations are required to support the policy objectives of the *Petroleum and Gas (Production and Safety) Act 2004*. The Regulations as introduced in late 2004 have now been implemented and some anomalies have been detected. In particular the sections concerning gas in vehicles caused some confusion as it attempted to cover two very different uses of gas (engines and appliances) by the same regulatory mechanisms. These have now been divided into two separate parts in the Regulation. Other minor changes have addressed such anomalies as the use of an annual gas usage figure as a measure of size, now replaced with an hourly consumption rate. The inclusion of other gases as fuel gas such as biogas, rubbish tip gas and hydrogen covers new applications of these gases. As well the inclusion of carbon dioxide allows for the regulation of carbon sequestration activities. Safety provisions covering the retesting of gas cylinders and tanks have been broadened to cover both company-owned and privately-owned containers and a new provision has mandated the fitting of a test point on new and changeover LP gas installations to allow safety tests to be carried out. There are new guidelines on the competency requirements for gas work authorisations and some administrative procedures, which cover licence processes including change of address notification. Some provisions have been amended to bring them into line with other legislation and updated Australian standards are referenced.

## **Consultation**

As many of these changes are simply clarification or better presentation of the original intent, extensive consultation has been unnecessary. However, for those issues involving the LP gas industry, discussions have been held with major players including LP Gas Australia, the industry association.

## **Notes on provisions**

Clause 1 provides for the short title of the Regulation.

Clause 2 provides for the date of commencement.

Clause 3 notes that Part 2 amends the *Coal Mining Safety and Health Regulation 2001*.

Clause 4 provides for the section to also apply to mineral hydrocarbon leases as petroleum can also be produced from this type of lease.

Clause 5 clarifies the changes that need to be considered when reading and applying the stated provisions of *Petroleum and Gas (Production and Safety) Regulation 2004* under *Coal Mining Safety and Health Regulation 2001*.

Clause 6 notes that Part 3 amends the *Petroleum and Gas (Production and Safety) Regulation 2004*.

Clause 7 inserts a new section, which makes all notes in the regulation part of the regulation.

Clause 8 prescribes carbon dioxide as petroleum under the Act. Carbon dioxide is included in the definition of “petroleum” to enable evaluating or testing natural underground reservoirs for carbon sequestration, on a particular block of the authority to prospect, under s.32(1)(d) of the Act. The definition applies for 2 years from when the approved testing on a particular block starts and with discretion from the Minister for extension of the 2 years. The definition also applies while any conditions imposed by the Minister are complied with.

Clause 9 amends section 6, which provides for substances to be prescribed as fuel gas. The section is modified to allow hydrogen to be covered both as a transport fuel (as originally provided for) and also as a general fuel. This will accommodate the proposed use of hydrogen as a fuel in some power applications. Additional gases produced by biochemical processes, namely biogas, gas produced from sewage and gas produced from a waste disposal tip have been included to ensure the safety provisions of the *Petroleum and Gas (Production and Safety) Act 2004* cover the collection, transportation and use of these gases.

Clause 10 amends section 8 to update the date of the listed Australian Standard.

Clause 11 replaces section 10 to clarify the application of the term “operating plant”. Firstly, a lower limit has been placed on the activity of transporting LPG cylinders, as the intent is not to include very small gas suppliers including hardware stores, in the requirements for a Safety Management Plan. Secondly, the storage limit for storing LPG cylinders has been increased to 2000 litres as the previous limit

was too low, and included a number of small commercial premises. In both cases the appliances have been extended to include cylinders and tanks. A third change is to replace the annual usage figure (500TJ/year) with a near equivalent hourly figure (50 GJ/hr). This will make the legislation apply to peak load power stations regardless of their usage pattern. Carbon sequestration activities are also included under the definition of operating plant thus invoking the relevant safety provisions of the *Petroleum and Gas (Production and Safety) Act 2004*.

Clause 12 provides for new Sections 54A to 54E and is the direct result of recommendations by the Coroner following the death of a driller at Myall Creek in 2003. The new sections (along with the others set out below) bring into permanent effect a Safety Instruction made by the Chief Inspector, Petroleum and Gas to implement those recommendations.

Section 54A is a more general requirement for job safety analysis and training.

Section 54B is a specific training requirement with respect to installing well completion equipment. It is intended that this would also apply when reinstallation of equipment occurs after work over activities.

Section 54C requires job safety analysis to be made before undertaking any activity for which there are no standard operating procedures or where changed circumstances exist with respect to existing standard operating procedures.

Section 54D implements the recommendation that an additional emergency shutdown system, remote from the immediate plant area, be provided so that persons can shut down the plant from a safe distance.

Section 54E provides a specific requirement to keep bore pressures at a minimum when carrying out well completion work. If the standard requirement to do this using a flare line is not to be followed or if there is a valid reason for not reducing pressure, then a risk assessment must be undertaken and controls used to ensure that the risk in relation to the activity is no greater than the level of risk that would have been achieved if those things were done. The written approval obtained from certain

parties before the alternative course of action is taken is also required.

Clause 13 provides for a new division to accommodate two additional sections 59B & 59C to implement the Coroner's recommendations.

Section 59 applies the division to additional matters to be included in safety management plan for drilling related operating plant.

Section 59A repeats the previous section 59.

Section 59B requires special consideration of ignition sources to be included as part of Safety Management Plans.

Section 59C requires the operator of a drilling related operating plant to develop specific standard operating procedures with respect to the installation of well completion equipment.

Clause 14 inserts a new section 61A to implement the Coroner's recommendations on Myall Creek. The new provisions require manufacturers of wellhead equipment to provide appropriate instructions for its use, to the operators of the equipment.

Clause 15 relocates an example to the correct place in the regulation.

Clause 16 amends section 76 to provide that any the site senior executive may apply for an exemption. This is because this regulation may in some circumstances apply to activities on a mining lease.

Clause 17 provides that if a site senior executive applies for exemption under s 76, section 77 does not apply. This is because there is no need for the views of the mining tenement holder (who is essentially the employer of the senior site executive or an affiliated company) to be sought.

Clause 18 makes section number changes that resulted from changes to section 76 and 77.

Clause 19 amends section 85, which requires gas cylinders and tanks to be tested. The amendment ensures that the testing requirements of the relevant standard directly apply to all cylinders and tanks, including privately-owned cylinders, which must be tested every ten years as a safety requirement.

Clause 20 closes a loophole where a gas supplier could keep no records of gas installations if the gas installer did not provide the information.

Clause 21 provides for a pressure test point to be provided on new gas installations and on change of gas supplier. This will enable suppliers to easily test for any gas leakage and for correct pressure as required by the Regulation.

Clause 22 inserts a new heading for this part. The part now also applies to stationary engines and has been split into two separate divisions, which separates the rules applying to engine fuel systems in vehicles or vessels from those gas systems that supply to appliances in vehicles or vessels.

Clause 23 inserts a new division for the preliminary part

Clause 24 removes a section no longer required in the new arrangements.

Clause 25 provides definitions for the revised part. The term authorised certifier is intended to cover the holder of a gas work authorisation (motor fuel) including anyone authorised by the holder to certifier under that authorisation. Similarly the term authorised installer has a similar meaning for gas work authorisation (industrial appliances) with respect to type B devices. The term authorised installer also includes gas work licence holders who can certify for type A devices (appliances). In all cases the certifier must be a person who is entitled under the licence or authorisation to certifier the particular gas system.

The definition commercial vehicle or vessel specifically mentions fork lift trucks to avoid any misunderstandings. Inspection certificate is more clearly defined to cover the cases of installation, inspection and alteration. Inspection certificates from other Australian jurisdictions are also defined to allow them to be accepted, this being in line with Mutual recognition principles. Used vehicles and vessels have been redefined to ensure that the term includes all vehicles sold after a vehicle has first been registered in Australia.

Clause 26 inserts a new heading for this division, which applies only to gas fuel systems for engines in vehicles, vessels or stationary engines. The revised sections 98 to 105 below are now strictly for gas fuel systems and not gas appliances such as gas cookers.

Clause 27 replaces sections 98 and 99 to include the current terminology for gas fuel systems. Section 98 now allows for the use of a compliance plate, which is the normal certification method for new vehicles, as an alternative to an inspection certificate. In both cases of

new and used vehicles, interstate certificates are allowed. An inspection certificate is not required when an unregistered vehicle is sold.

Clause 28 replaces the phrase “gas systems” with the more correct “gas fuel systems”.

Clause 29 replaces sections 101 and 102 in line with the new application just to gas fuel systems in vehicles, vessels and for stationary engines. Section 102 has been changed to only apply to altering the gas system. The definition of the word “alter” relates to changes in design of performance as opposed to “repair” which simply brings the unit back to its original design state. In both cases the certification, if made, must certify that the whole gas system (not just for instance the alteration) meets the safety requirements.

Clause 30 replaces the phrase “gas systems” in section 103 with the more correct “gas fuel systems”.

Clause 31 replaces the phrase “gas systems” in section 104 with the more correct “gas fuel systems”.

Clause 32 replaces section 105, updating terms with the more correct, “gas fuel systems” and makes the requirement for carbon monoxide monitoring a general requirement rather than only after repair. The emission of excessive carbon monoxide from exhausts of vehicles used in confined spaces (usually forklifts) is a major source of hazard.

Clause 33 allows for the exemption of a gas inspection certificate being provided for owners of vehicles in the same remote areas of the State, which currently are already exempt from “roadworthy” certificates.

Clause 34 inserts a new division to specifically cover gas systems that supply appliances in vehicles or vessels.

Section 105B states the scope of the new division.

Section 105C requires a compliance certificate for these installations to be supplied prior to sale.

Section 105D applies to used vehicles and vessels and also requires the supply of a compliance certificate. An inspection certificate is not required when an unregistered vehicle is sold.

Section 105E provides that commercial vehicles with gas appliances on board must be inspected annually. This covers vehicles such as pie carts and food vans.

Section 105F requires the authorised certifier to issue a certificate or give the owner notice of rectification work to be undertaken.

Section 105G provides that anyone who alters or repairs the gas system must also provide certification. The definition of alter has been restricted as per the changes to s 102. The certification, if made, must certify that the whole gas system (not just the alteration) meets the safety requirements.

Clause 35 corrects an anomaly in section 114. This section requires approval for filling cylinders on or adjacent to residential premises and was intended to reduce problems arising from neighbours being concerned from regular gas release which occurs during such transfer operations. It was not intended to apply to gas suppliers filling cylinders from tankers and this is now specifically exempted.

Clause 36 amends the name of the type of authorisation in section 120. The scope of work allowed under an authorisation (motor fuel installation) is more than installation and includes servicing, repairing, altering, removing, testing and certifying the gas system. To reflect this wider scope the name 'installation' has been removed from the authorisation name.

Clause 37 clarifies the intent of section 121 by using the expanded title "flammable hydrocarbon gases for refrigeration or air conditioning" which is consistent with wording used elsewhere in the Act.

Clause 38 redefines the term "major project" by replacing the previous annual consumption definition with an hourly rate, which is approximately equivalent. This means that the plant becomes a major project by size of the gas burners rather than by usage, which better equates to the complexity and risk associated with their use.

Clause 39 amends section 124 to include stationary engines in the definition of the authorisation. It also deletes the term "installation" as the scope of gas work includes servicing, repairing, altering, removing, testing and certifying the gas system.

Clause 40 clarifies the intent of the "servicing" authorisation to specifically exclude design changes or changes that will effect the



operating parameters of i.e. the performance of the system. Servicing work should be limited to 'like for like' replacement. It is also clarified that servicing authorisations cannot cover motor fuel or hydrocarbon refrigerant work. Servicing of this type of work should fall under the individual type authorisations

Clause 41 adds a new section 125A, which gives guidance as to the qualifications or experience required for a gas work authorisation. The equivalent requirements for a gas work licence are already in the regulation. Because of the widely varying nature of these authorisations, they will often be determined on a case by case basis. However there are some formal courses, particularly in the automotive area, which will continue to be recognised as measures of competency.

Clause 42 introduces a new division covering essential administrative provisions for licences and authorisations. These were overlooked in the original regulation.

Section 126A requires holders to notify any change of address. These details are required for renewal notices and newsletters.

Section 126B requires the return of a suspended or cancelled licence or authorisation to assist in preventing the person continuing to work illegally.

Section 126B allows an expired licence or authorisation to remain in force if a new application has been made but has not yet been processed. The licence or authorisation will remain in force until the chief inspector has decided whether to grant or refuse the new application. This allows holders to continue to validly work during this interim period.

Clause 43 amends section 135(2)(h) by replacing the former annual gas usage definition with an hourly rate for consistency with other provisions above. To prevent duplication of fees a person will not be liable for this major consumer fee if they already qualify under section 135(2)(c) or (d).

Clause 44 gives details of the information required for a return from a major consumer.

Clause 45 updates a number of Australian standards in the schedule to call up the latest versions of those standards.

Clause 46 adds work related illnesses to the list of “prescribed incidents” which must be reported. This is necessary for those places (such as petroleum leases or mining leases) where the Workplace Health and Safety Act does not apply. In addition reporting of injuries requiring medical treatment is now required regardless of where the treatment took place.

Clause 47 replaces a wording in Schedule 7 to exempt vehicles, which are “subject to the provisions of” the *Transport (Road Use Management) Act 1995*. The previous wording “licensed under” did not cover vehicles, which were subject to the provisions of that Act but were not licensed as such.

Clause 48 makes changes to accommodate an application for a gas work authorisation (motor fuel) and an authorisation (industrial appliances) made at the same time. In this case only one application fee is payable and a person who held both types of authorisation would pay only one annual fee.

Clause 49 provides definitions for the amended provisions including a number of new terms related to drilling operations. The definition of compliance certificate has been changed to include the certificates made under section 105F and 105G.

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#### ENDNOTES

- 1 Laid before the Legislative Assembly on . . .
- 2 The administering agency is the Department of Natural Resources and Mines.