



Queensland

Petroleum Regulation 2004

Subordinate Legislation 2004 No. 310

made under the

Petroleum Act 1923

Contents

		Page
Chapter 1	Preliminary	
1	Short title	5
2	Commencement	5
3	Dictionary [P&G, s 3]	5
4	References to Petroleum and Gas (Production and Safety) Regulation 2004	5
Chapter 2	Exploring for and producing petroleum	
Part 1	Reporting	
Division 1	Content of reports and notices required under the Act	
Subdivision 1	Preliminary	
5	Definitions for div 1 [P&G, s 12]	6
Subdivision 2	Proposed work programs and later development plans	
6	Authority to prospect—proposed work program [P&G, s 13]	8
7	Lease—proposed later development plan [P&G, s 14]	8
Subdivision 3	Conversion to water supply bore	
8	Notice of conversion [P&G, s 19]	9
Subdivision 4	Relinquishment	
9	Relinquishment report for an authority to prospect [P&G, s 20] . .	9
10	Relinquishment report for a lease [P&G, s 21]	10
Subdivision 5	End of tenure	
11	End of tenure report [P&G, s 22]	11

Subdivision 6	Annual reports	
12	Annual report for an authority to prospect [P&G, s 23].	12
13	Annual report for a lease [P&G, s 24].	13
Subdivision 7	Surrenders	
14	Surrender report for an authority to prospect [P&G, s 28]	15
Division 2	Other notices and reports	
Subdivision 1	Preliminary	
15	Purpose of div 2 [P&G, s 30]	17
Subdivision 2	Notices	
16	Notice of intention to drill a well or bore [P&G, s 31]	17
17	Notice of completion, alteration or abandonment of well or bore [P&G, s 32].	18
18	Notice of intention to carry out seismic survey or scientific or technical survey [P&G, s 33]	18
19	Notice of completion of seismic survey or scientific or technical survey [P&G, s 34]	19
Subdivision 3	Well reports	
20	Well proposal report [P&G, s 35]	20
21	Daily drilling report [P&G, s 36]	20
22	Well completion report [P&G, s 37]	22
23	Well or bore abandonment report [P&G, s 38]	24
Subdivision 4	Survey reports	
24	Seismic survey report [P&G, s 39]	27
25	Scientific or technical survey report [P&G, s 40]	29
Subdivision 5	Petroleum reports	
26	Definition for sdiv 5 [P&G, s 41]	30
27	How particular volumes must be stated in reports [P&G, s 42]	30
28	Petroleum production report—lease [P&G, s 43]	30
29	Petroleum reserves report [P&G, s 44]	32
30	Production testing report [P&G, s 45].	32
Division 3	Other matters relating to records and samples	
31	Samples required to be kept [P&G, s 47]	34
32	Cutting samples [P&G, s 48]	34
33	Cores [P&G, s 49]	35
34	Fluid samples [P&G, s 50]	36
35	Confidentiality of required information for 1923 Act petroleum tenure holders [P&G, s 51].	37
36	Publication of required information [P&G, s 52]	39

Part 2	Other requirements	
37	Plugging and abandoning a well or bore [P&G, s 60].	40
38	Requirement to plug shot holes [P&G, s 61]	40
Chapter 3	Miscellaneous	
Part 1	Fees, rents and security	
39	Fees generally [P&G, s 133].	41
40	Annual rent [P&G, s 145]	41
41	Security for 1923 Act petroleum tenures [P&G, s 150].	42
42	Prescribed interest rates [P&G, s 151].	42
Part 2	Other provisions	
43	Requirements for petroleum register [P&G, s 154].	43
Chapter 4	Repeal of Petroleum Regulation 1966 and transitional provisions	
44	Definitions for ch 4	43
45	Repeal of Petroleum Regulation 1966	43
46	Continuing effect of notice given under s 114 of repealed regulation	43
47	Continued application of repealed reporting provisions—events before commencement	44
48	Continued application of repealed reporting provisions—events after commencement	44
Schedule 1	Requirements for plugging and abandoning wells and bores	46
Part 1	Preliminary	
1	Definitions for sch 1	46
Part 2	Requirements for all wells and bores	
2	Abandonment to be consistent with good industry practice	46
3	Capping of well or bore	46
4	Casing to be sealed	47
Part 3	Additional requirements for wells and bores, other than horizontal wells	
5	Isolation of aquifers and porous formations	47
6	Casing of prescribed well or bore	47
7	Cement to be used for plugs etc.	48
8	Requirement for packer left in prescribed well or bore	48
9	Fluid to be left in prescribed well or bore	48
10	Requirements if steel casing or drill string is left in coal seam	49
Part 4	Additional requirement for horizontal wells	
11	Requirement for liner	50

Schedule 2	Fees	51
Schedule 3	Requirements for petroleum register	53
1	All 1923 Act petroleum tenures	53
2	Additional matters for an authority to prospect	54
3	Additional matters for a lease	55
Schedule 4	Dictionary	56

Chapter 1 Preliminary

1 Short title

This regulation may be cited as the *Petroleum Regulation 2004*.

2 Commencement

This regulation commences on 31 December 2004.

3 Dictionary [P&G, s 3]

The dictionary in schedule 4 defines particular words used in this regulation.

4 References to Petroleum and Gas (Production and Safety) Regulation 2004

- (1) The information included in square brackets after a section heading is a reference to the comparable section of the *Petroleum and Gas (Production and Safety) Regulation 2004*.
- (2) The brackets and information do not form part of this regulation.

Chapter 2 Exploring for and producing petroleum

Part 1 Reporting

Division 1 Content of reports and notices required under the Act

Subdivision 1 Preliminary

5 Definitions for div 1 [P&G, s 12]

In this division—

general area information, for a relinquishment report for a 1923 Act petroleum tenure, means each of the following—

- (a) a location map showing—
 - (i) the area of the 1923 Act petroleum tenure immediately before the relinquishment (the *previous tenure area*); and
 - (ii) the relinquished part of the area of the tenure (the *relinquished area*);
- (b) a map showing the location in the relinquished area of—
 - (i) each well and bore drilled under the tenure; and
 - (ii) each seismic line used for a seismic survey carried out under the tenure;
- (c) a structure contour map showing the seismic horizons (seismic reflectors) in the relinquished area;
- (d) a map showing the leads and prospects in the relinquished area;
- (e) a general description of the topographical features of the previous tenure area and the relinquished area, including, for example, access to the areas.

hazard information, for a relinquishment report or surrender report for a 1923 Act petroleum tenure, means each of the following—

- (a) a summary of all significant hazards to future safe and efficient mining of coal created under the tenure that, under section 690(1)(g) or 706 of the 2004 Act or under this regulation or the *Petroleum and Gas (Production and Safety) Regulation 2004*, are required to be reported;
- (b) for each hazard mentioned in the summary under paragraph (a)—a reference to the report that contains details of the hazard;
- (c) for any other hazard, or potential hazard, created under the tenure to future safe and efficient mining of coal or oil shale in the area of the tenure—
 - (i) the nature of the hazard or potential hazard; and
 - (ii) the way in which the hazard or potential hazard was created; and
 - (iii) the location of the hazard or potential hazard; and
 - (iv) measures taken to prevent or reduce the hazard or potential hazard to mitigate its effects.

reporting period, for an annual report required under section 76F¹ of the Act to be lodged by a 1923 Act petroleum tenure holder, means the period to which the report relates under the section.

tenure information, for a relinquishment report for a 1923 Act petroleum tenure, means each of the following—

- (a) the day the tenure was granted;
- (b) the day the relinquishment takes effect;
- (c) the period of the work program or development plan, as applicable, for the tenure;
- (d) the blocks or sub-blocks comprising the relinquished part of the area of the tenure.

1 Section 76F (Obligation to lodge annual reports) of the Act

Subdivision 2 Proposed work programs and later development plans

6 Authority to prospect—proposed work program [P&G, s 13]

For section 25A(1)(i)² of the Act, the matters are each of the following—

- (a) a description of the geological model for the area of the authority;
- (b) an assessment of the potential for petroleum discovery in the area;
- (c) the rationale, in relation to the geological model for the area, for the activities proposed to be carried out under the authority.

7 Lease—proposed later development plan [P&G, s 14]

(1) For section 53A(1)(g)³ of the Act, the matters are—

- (a) for each natural underground reservoir within the area of the lease or proposed lease the applicant is aware of—the area limit of the reservoir; and
- (b) details, including the location, type and size, of any planned infrastructure intended to be located within the area of the lease or proposed lease.

Examples of infrastructure—

- 1 plant or works, including, for example, communication systems, compressors, powerlines, pumping stations, reservoirs, roads, evaporation or storage ponds and tanks
- 2 temporary structures or structures of an industrial or technical nature, including, for example, mobile and temporary camps

(2) In this section—

2 Section 25A (General requirements) of the Act

3 Section 53A (General requirements) of the Act

area limit of a natural underground reservoir means the location of the boundaries of—

- (a) the proved and probable reserves of petroleum in the reservoir; or
- (b) the reserves of petroleum in the reservoir determined in another way that is acceptable to the chief executive.

Example—

reserves of petroleum worked out under a code other than the SPE code

Subdivision 3 Conversion to water supply bore

8 Notice of conversion [P&G, s 19]

For section 75M⁴ of the Act, the information is each of the following—

- (a) a description of the location of the water supply bore;
- (b) the name of the licensed water bore driller who carried out the modification of the well;
- (c) the date on which the well was converted to a water supply bore.

Subdivision 4 Relinquishment

9 Relinquishment report for an authority to prospect [P&G, s 20]

- (1) This section prescribes, for section 75Z(1)(b)⁵ of the Act, other information that must be contained in a relinquishment report for an authority to prospect.
- (2) The information is each of the following—
 - (a) the tenure information for the report;

⁴ Section 75M (Notice of conversion) of the Act

⁵ Section 75Z (Relinquishment report) of the Act

- (b) the general area information for the report;
- (c) the geological model of the relinquished part of the area of the authority (the *relinquished area*) and an assessment of the potential for petroleum discovery in the area;
- (d) a summary of the results of all authorised activities for the authority carried out in the relinquished area since the authority took effect and the conclusions drawn by the holder based on the results;
- (e) an index of all reports lodged, as required under the Act, in relation to the authorised activities carried out in the relinquished area;
- (f) the hazard information for the report;
- (g) the volume of petroleum or water produced from each well or bore in the relinquished area for each year since the authority took effect;
- (h) if a well in the relinquished area has produced petroleum from a coal seam since the authority took effect—all data or other information held by the holder that, in the holder's reasonable opinion, may help a person to identify in the future any remaining areas of potential free gas that may have been created by removing water from the seam and producing gas from it;
- (i) the reason the holder has relinquished the area.

10 Relinquishment report for a lease [P&G, s 21]

- (1) This section prescribes, for section 75Z(1)(b) of the Act, other information that must be contained in a relinquishment report for a lease.
- (2) The information is each of the following—
 - (a) the tenure information for the report;
 - (b) the general area information for the report;
 - (c) the volume of petroleum produced under the lease from wells in the relinquished part of the area of the lease (the *relinquished area*) since the lease took effect;

- (d) the geological model of the natural underground reservoirs in the relinquished area;
- (e) the extraction methods used to produce petroleum in the relinquished area under the lease;
- (f) the volume of petroleum or water produced under the lease from each well or bore in the relinquished area for each year since the lease took effect;
- (g) a summary of the results of all authorised activities for the lease carried out in the relinquished area since the lease took effect and the conclusions drawn by the holder based on the results;
- (h) an index of all reports lodged, as required under the Act, in relation to the authorised activities carried out in the relinquished area;
- (i) the hazard information for the report;
- (j) if a well in the relinquished area has produced petroleum from a coal seam since the lease took effect—all data or other information held by the holder that, in the holder's reasonable opinion, may help a person to identify in the future any remaining areas of potential free gas that may have been created by removing water from the seam and producing gas from it;
- (k) the reason the holder has relinquished the area.

Subdivision 5 End of tenure

11 End of tenure report [P&G, s 22]

- (1) This section prescribes, for section 76(1)(b)⁶ of the Act, other information that must be stated in an end of tenure report.
- (2) The information is any information mentioned in section 9 or 10 or, for an end of tenure report for an authority to prospect, section 14, that is not mentioned in section 76(1)(a) of the Act.

6 Section 76 (End of tenure report) of the Act

- (3) For subsection (2), a reference in section 9 or 10 to the relinquished area, and a reference in section 14 to the surrendered area, is taken to be a reference to the area of the tenure immediately before it ended.
- (4) Subsection (2) does not apply to the extent the information mentioned in section 9, 10 or 14 has already been included in a relinquishment report or surrender report lodged for the tenure.

Subdivision 6 Annual reports

12 Annual report for an authority to prospect [P&G, s 23]

- (1) For section 76F(1)⁷ of the Act, the following information must be contained in an annual report for an authority to prospect—
 - (a) the authorised activities for the authority carried out during the reporting period;
 - (b) the status, on the last day of the reporting period, of each well or bore drilled under the authority since it took effect;
 - (c) whether or not the work program for the authority was complied with during the reporting period, including details of, and reasons for, any failure to comply with the program;
 - (d) a statement of the authorised activities proposed to be carried out under the authority for the next 12 month period;
 - (e) an index of all reports lodged under the Act by the holder during the reporting period in relation to the authority;
 - (f) the volume, or an estimate of the volume, of associated water and other underground water that was necessarily taken during the reporting period as part of petroleum production under the authority;

⁷ Section 76F (Obligation to lodge annual reports) of the Act

- (g) an expenditure statement disclosing the expenditure incurred in relation to each authorised activity carried out under the authority during the reporting period.
- (2) The expenditure statement mentioned in subsection (1)(g) must separately itemise expenditure in relation to each of the following, as appropriate—
 - (a) drilling and completing a well or bore;
 - (b) seismic surveying;
 - (c) scientific or technical surveying;
 - (d) technical evaluation and analysis;
 - (e) operational and administrative expenses.
- (3) However, the expenditure statement must not include expenditure relating to any of the following—
 - (a) costs of obtaining background land tenure searches and assessments;
 - (b) cultural heritage survey costs;
 - (c) rent, annual fees and security paid under the Act in relation to the authority;
 - (d) legal costs;
 - (e) expenditure on capital items.
- (4) The expenditure statement must be lodged with, but be separate from, the rest of the annual report.

13 Annual report for a lease [P&G, s 24]

- (1) For section 76F(1) of the Act, the following information must be contained in an annual report for a lease—
 - (a) the authorised activities for the lease carried out during the reporting period;
 - (b) the status, on the last day of the reporting period, of each well or bore drilled under the lease since it took effect;
 - (c) whether or not the development plan for the lease was complied with during the reporting period, including details of, and reasons for, any failure to comply with the plan;

- (d) a statement of the authorised activities proposed to be carried out under the lease for the next 12 month period;
 - (e) an index of all reports lodged under the Act by the holder during the reporting period in relation to the lease;
 - (f) the volume, or an estimate of the volume, of associated water, and other underground water, that was necessarily taken from each natural underground reservoir during the reporting period as part of petroleum production under the lease;
 - (g) the volume of petroleum produced under the lease from each natural underground reservoir during the reporting period;
 - (h) the holder's analysis of how the volume mentioned in paragraph (g) relates to any requirement stated in the development plan for the lease about the volume of petroleum to be produced under the lease;
 - (i) the volume of petroleum in a gaseous state produced under the lease that was flared or vented during the reporting period;
 - (j) the volume of petroleum that was used under the lease for carrying out authorised activities during the reporting period;
 - (k) the volume of petroleum that was injected into a natural underground reservoir for storage under the lease during the reporting period;
 - (l) an expenditure statement disclosing the total capital expenditure and the total operating expenditure in relation to authorised activities carried out under the lease during the reporting period.
- (2) The expenditure statement mentioned in subsection (1)(l) must be lodged with, but be separate from, the rest of the annual report.

Subdivision 7 Surrenders

14 Surrender report for an authority to prospect [P&G, s 28]

- (1) This section prescribes information that must be included in a report required under section 21(4)(c)(ii)⁸ of the Act to accompany a surrender application in relation to part of the area of an authority to prospect.
- (2) The report must contain each of the following—
 - (a) the tenure information;
 - (b) the general area information;
 - (c) the geological model of the surrendered part of the area of the authority (the *surrendered area*) and an assessment of the potential for petroleum discovery in the area;
 - (d) a summary of the results of all authorised activities for the authority carried out in the surrendered area since the authority took effect and the conclusions drawn by the holder based on the results;
 - (e) an index of all reports lodged, as required under the Act, in relation to the authorised activities carried out in the surrendered area;
 - (f) the hazard information for the report;
 - (g) information about the volume and location of all petroleum and water produced under the authority from natural underground reservoirs in the surrendered area since the authority took effect;
 - (h) if a well in the surrendered area has produced petroleum from a coal seam since the authority took effect—all data or other information held by the holder that, in the holder's reasonable opinion, may help a person to identify in the future any remaining areas of potential free gas that may have been created by removing water from the seam and producing gas from it;

8 Section 21 (Surrender of authority to prospect) of the Act

- (i) the reason the holder has applied to surrender the part of the area of the authority.
- (3) In this section—

general area information means each of the following—

- (a) a location map showing—
 - (i) the area of the authority to prospect immediately before the surrender (the ***previous tenure area***); and
 - (ii) the surrendered area;
- (b) a map showing the location in the surrendered area of—
 - (i) each well and bore drilled under the authority; and
 - (ii) each seismic line used for a seismic survey carried out under the authority;
- (c) a structure contour map showing the seismic horizons (seismic reflectors) in the surrendered area;
- (d) a map showing the leads and prospects in the surrendered area;
- (e) a general description of the topographical features of the previous tenure area and the surrendered area, including, for example, access to the areas.

tenure information means each of the following—

- (a) the last day of the current term of the authority;
- (b) the period of the work program for the authority;
- (c) the blocks or sub-blocks comprising the surrendered area.

Division 2 Other notices and reports

Subdivision 1 Preliminary

15 Purpose of div 2 [P&G, s 30]

The division prescribes, for section 76G(1)(b)⁹ of the Act, notices and reports required to be lodged by the holder of a 1923 Act petroleum tenure.

Subdivision 2 Notices

16 Notice of intention to drill a well or bore [P&G, s 31]

- (1) A 1923 Act petroleum tenure holder must, at least 5 business days before drilling of a well or bore under the tenure starts, lodge a notice stating that the well or bore is to be drilled.
- (2) The notice must—
 - (a) for a notice about a well—state a proposed identifying name for the well; and
 - (b) be in the approved form; and
 - (c) be accompanied by—
 - (i) a map showing the location of the well or bore in relation to the area of the tenure; and
 - (ii) for a notice about a well—a well proposal report for the well containing the information required under section 20.
- (3) A proposed identifying name of a well stated in the notice must not be the same, or substantially the same, as a name—
 - (a) recorded in the petroleum register for another well; or
 - (b) recorded in the petroleum register under the 2004 Act for a petroleum well under that Act.

⁹ Section 76G (Power to require information or reports about authorised activities to be kept or given) of the Act

17 Notice of completion, alteration or abandonment of well or bore [P&G, s 32]

- (1) This section applies if—
 - (a) drilling of a well or bore is completed; or
 - (b) the completion configuration of a well changes; or
 - (c) a well or bore is abandoned.
- (2) For subsection (1)—
 - (a) drilling of a well or bore is completed if—
 - (i) the drilling rig last used to drill the well or bore is moved so it is no longer above the well or bore; and
 - (ii) the 1923 Act petroleum tenure holder under which the well or bore was drilled intends no further drilling of the well or bore to occur; and
 - (b) the completion configuration of a well changes if, after drilling of the well is completed—
 - (i) additional casing is installed in the well; or
 - (ii) any part of the well is plugged, other than for decommissioning the well; or
 - (iii) an interval in the well is altered in any other way.
- (3) The holder of the 1923 Act petroleum tenure under which the well or bore was drilled must, within 10 business days after the event mentioned in subsection (1) happens, lodge a notice stating that the event has happened.
- (4) The notice must—
 - (a) be in the approved form; and
 - (b) be accompanied by a map showing the location of the well or bore.

18 Notice of intention to carry out seismic survey or scientific or technical survey [P&G, s 33]

- (1) This section applies if a seismic survey or a scientific or technical survey is to be carried out within the area of a 1923 Act petroleum tenure.

- (2) The tenure holder must, at least 10 business days before the survey starts, lodge a notice stating each of the following—
 - (a) an identifying name or code for the survey;
 - (b) the type of survey to be carried out;
Examples—
seismic, geophysical, geochemical, geotechnical
 - (c) a description of the area to be surveyed;
 - (d) the day surveying will start;
 - (e) the expected duration of the surveying.
- (3) The notice must—
 - (a) be in the approved form; and
 - (b) be accompanied by a map showing the location of the area to be surveyed.
- (4) The identifying name or code for the survey stated in the notice must not be the same, or substantially the same, as an identifying name or code for another survey recorded in the petroleum register or the petroleum register under the 2004 Act.

19 Notice of completion of seismic survey or scientific or technical survey [P&G, s 34]

- (1) This section applies if a seismic survey or a scientific or technical survey carried out within the area of a 1923 Act petroleum tenure is completed.
- (2) For subsection (1), a survey is completed as soon as all of the raw data for the survey has been recorded or recovered.
- (3) The tenure holder must, within 10 business days after the completion day for the survey, lodge a notice stating that the survey has been completed.
- (4) The notice must be in the approved form.

Subdivision 3 Well reports

20 Well proposal report [P&G, s 35]

For section 16(2)(c)(ii), a well proposal report required to accompany a notice of intention to drill a well must contain each of the following—

- (a) a description of, and map showing, the location of the proposed well within the area of the 1923 Act petroleum tenure;
- (b) a geological summary of the area;
- (c) a description of the type, and an estimate of the volume, of the potential resources of the target natural underground reservoir;
- (d) in relation to the drilling proposed to be carried out for the well, each of the following—
 - (i) the predicted stratigraphy of the proposed location of the well;
 - (ii) the holder's plan for taking samples and cores during the drilling of the well;
 - (iii) the types of drill bits and drilling fluids to be used;
 - (iv) details of the casing proposed to be used in the well, the intervals proposed to be cased and the specifications of the cement proposed to be used;
 - (v) the testing for the presence of petroleum to be carried out by the holder;
 - (vi) a time-depth curve showing the anticipated depth in metres to be drilled in relation to time.

21 Daily drilling report [P&G, s 36]

- (1) A 1923 Act petroleum tenure holder must lodge a daily drilling report for each day on which drilling of a well is carried out under the tenure.
- (2) The report must be given not later than 5 p.m. on the next business day after the day to which the report relates.

- (3) The report must contain each of the following in relation to the drilling carried out during the day—
- (a) the identifying name of the well;
 - (b) the tenure holder's name and the tenure under which the well was drilled;
 - (c) the type of drilling rig used;
 - (d) a summary of the drilling operations carried out;
 - (e) the depth in metres of the well at the end of the day's drilling;
 - (f) the size and type of drill bit used;
 - (g) the drilling fluids and additives used;
 - (h) the size and depth in metres of any casing inserted in the well;
 - (i) the depth in metres of the top and bottom of each cemented interval in the well;
 - (j) the results of any deviation surveys carried out in the well;
 - (k) a description of any drill stem tests or other tests carried out in the well;
 - (l) the depth in metres of the top and bottom of the hydrocarbon show intervals in the well and the type and description of any surface observations of each interval;
 - (m) the type of any perforations in the well and the depth in metres of the top and bottom of the perforated intervals;
 - (n) details of any stimulation carried out;
 - (o) details of any squeeze cementing or cement plugging carried out;
 - (p) a description of any cores or cutting samples taken.
- (4) In this section—

deviation survey means a survey of the path of a well that measures its direction in 3 dimensions.

22 Well completion report [P&G, s 37]

- (1) A 1923 Act petroleum tenure holder must lodge a well completion report for a well drilled under the tenure.
- (2) The report must be given not later than 6 months after the rig release day for the well.
- (3) The report must contain each of the following—
 - (a) the type and number of the tenure;
 - (b) the name, and postal address, of the operator of the well;
 - (c) the identifying name of the well;
 - (d) a well card for the well (a summary of the information about the well in the report);
 - (e) a map showing the location of the well;
 - (f) a geological summary of the area of the tenure;
 - (g) the ground level and kelly bushing level in metres for the well;
 - (h) the total depth in metres of the well;
 - (i) the following days—
 - (i) the day the drilling of the well started;
 - (ii) the day the total depth of the well was reached;
 - (iii) the rig release day for the well;
 - (j) details of the drilling rig, the number and type of drill bits, and the drilling fluids, used to drill the well;
 - (k) the status of the well on the rig release day;
 - (l) the surveyed path of the well;
 - (m) details of the casing and equipment installed in the well, with a diagram showing their location in the well;
 - (n) the type of any perforations, and the depth in metres of the top and bottom of the perforated intervals;
 - (o) details of the cementing in the well, including its location, the type of cement used and the depth in metres of the top and bottom of each cemented interval;

- (p) a description of all tests or surveys carried out for the purpose of drilling the well;
- (q) a geological interpretation of the well, including the stratigraphy of the rock units it intersects;
- (r) an identification of the intervals in the well that have the potential to produce petroleum;
- (s) an assessment of—
 - (i) the relevance of the well to the hydrocarbon potential within the vicinity of the well; and
 - (ii) the implications of the well for the future management of the natural underground reservoir to which the well relates;
- (t) a description of each geological sample taken during the drilling of the well, including the depth in metres at which the sample was taken;

Examples of geological samples—

cuttings, sidewall cores and conventional cores

- (u) an interpretation of the data obtained from the geophysical (or wireline) logs that have been run in the well.
- (4) For a directional well, the report must also state the position of each of the following—
 - (a) the stratigraphic units intersected by the well;
 - (b) the bottom of the well;
 - (c) any intersection of the well with another well.
 - (5) For subsection (4), the position must be expressed in relation to—
 - (a) total vertical depth in metres; and
 - (b) the horizontal plane.
 - (6) The report must be accompanied by each of the following—
 - (a) a digital image of the cores taken during the drilling of the well;
 - (b) the raw data, in digital form, of each geophysical (or wireline) log that has been run in the well;

- (c) a digital image of the graphic representations of the raw data mentioned in paragraph (b).
- (7) Also, if the well is plugged and abandoned before the rig release day for the well, the report must be accompanied by a well abandonment report for the well.

23 Well or bore abandonment report [P&G, s 38]

- (1) If a well or bore is plugged and abandoned, the 1923 Act petroleum tenure holder must lodge a well or bore abandonment report—
- (a) for a well that is plugged or abandoned before the rig release day for the well—with the well completion report for the well required under section 22; or
 - (b) otherwise—not later than 2 months after the completion day.
- (2) The report must contain each of the following—
- (a) on the first page, each of the following details—
 - (i) the type and number of the petroleum tenure;
 - (ii) the identifying name of the well or bore;
 - (iii) the name of the author of the report;
 - (iv) the name of the tenure holder;
 - (v) the name of the operator of the well or bore;
 - (vi) the name of the person submitting the report;
 - (vii) the date of the report, in day-month-year format;
 - (b) a summary and history of the well or bore, including a location map and, for a well, the date on which a well completion report for the well was lodged;
 - (c) the following details about the well or bore—
 - (i) its total depth in metres;
 - (ii) the position at the top and bottom, expressed as required under subsection (3), and the thickness, of any of the following intersected by the well or bore—

- (A) a coal seam;
- (B) a natural underground reservoir;
- (C) an aquifer;
- (iii) the depth in metres of any perforations in the casing of the well or bore;
- (iv) the type of drilling rig used to drill the well or bore;
- (d) if stimulation of a coal seam was carried out in the well or bore under the tenure, the matters stated in subsection (4);
- (e) all surveys and measurements made in the well or bore, including any detailed interpretation of a survey or measurement;
- (f) in relation to the completion or abandonment of the well or bore, each of the following—
 - (i) details of the casing and equipment installed in the well or bore, with diagrams showing the major dimensions and features of the casing and equipment;
 - (ii) a full description of all equipment, including prescribed equipment, that is retained in the well, including the size and nature of the equipment and any features of the equipment that may cause a hazard to coal mining operations;
Example of features that may cause a hazard to coal mining operations—
 - aluminium, electronics or batteries
 - (iii) the surveyed location of any prescribed equipment;
 - (iv) the method of the cementing operations carried out in or on the well or bore, including the location and type of plugs, the intervals covered, the volume and type of cement used, any losses of cement due to voids or permeable strata, and the methods used to overcome losses of cement;
 - (v) the method, materials and volume of cement used to cement voids;

- (vi) a description of any other abandonment procedures used for the well or bore;
 - (vii) any other details of the activities undertaken in drilling, completing and plugging and abandoning the well or bore, including an assessment of their possible impacts, that would assist a person in making an assessment of potential risks to safe and efficient mining of coal.
- (3) For subsection (2)(c)(ii), the position at the top and bottom of the coal seam, natural underground reservoir or aquifer must be identified in relation to—
- (a) for a directional well—
 - (i) total vertical depth in metres; and
 - (ii) the horizontal plane; or
 - (b) otherwise—the depth in metres.
- (4) For subsection (2)(d), the matters are each of the following—
- (a) the depth in metres of the top and bottom of the interval over which the stimulation was carried out;
 - (b) a description of the equipment used to carry out the stimulation;
 - (c) for the interval mentioned in paragraph (a), a graphic representation of each of the following—
 - (i) casing pressure with time;
 - (ii) calculated bottom hole pressure with time;
 - (iii) slurry rate with time;
 - (iv) proppant concentration with time;
 - (v) calculated bottom hole concentration with time;
 - (d) any record made about the stimulation by the person who carried it out;
 - (e) any other details about the stimulation that would assist a person in making a future assessment of the impact of the stimulation on the coal seam and any increased risk to safe and efficient mining of coal.
- (5) In this section—

completion day means the day on which plugging and abandoning of the well or bore is completed as required to comply with the requirements under schedule 1.

prescribed equipment see the *Petroleum and Gas (Production and Safety) Regulation 2004*, section 69.¹⁰

Subdivision 4 Survey reports

24 Seismic survey report [P&G, s 39]

- (1) This section applies if the holder of a 1923 Act petroleum tenure—
 - (a) carries out a seismic survey of the area of the tenure; or
 - (b) reprocesses raw data obtained from a survey mentioned in paragraph (a).
- (2) The tenure holder must, not later than 12 months after the completion day for the survey, lodge a seismic survey report for the survey.
- (3) The report must contain each of the following—
 - (a) a description of the location of the area surveyed;
 - (b) a geological summary of the area surveyed;
 - (c) an index of previous seismic surveys carried out under the tenure within the area and a summary of the results of the surveys;
 - (d) the objectives of the survey;
 - (e) the activities carried out for the survey, including, for example, details of the seismic lines used and the days on which the activities were carried out;
 - (f) a description of each method used to acquire raw data, including—
 - (i) the equipment used for positioning, surveying, navigation or other purposes; and

¹⁰ *Petroleum and Gas (Production and Safety) Regulation 2004*, section 69 (Requirement to remove particular equipment from coal seam)

- (ii) the techniques and equipment used for recording and testing the data;
 - (g) a description of how the raw data was processed or, for a survey mentioned in subsection (1)(b), reprocessed;
 - (h) an evaluation of the processed or reprocessed data, including an interpretation of the seismic horizons (seismic reflectors) and any leads or prospects identified from the data;
 - (i) a map showing the location of the seismic lines used for the survey;
 - (j) if the report is not accompanied by grid files for the area surveyed in digital form—
 - (i) structure contour maps of seismic horizons (seismic reflectors) in the area surveyed; and
 - (ii) maps of the area showing variations in the thickness of stratigraphic units (isopach maps).
- (4) The report must be accompanied by—
 - (a) each of the following in digital form—
 - (i) the raw data obtained in relation to the survey and the record made as the data was recorded (commonly known as the ‘observer’s logs’);
 - (ii) a list of the seismic lines used and the range of the numbered stations on each line;
 - (iii) the surveyed location, including the elevation, of each seismic source and receiver point;
 - (iv) the processed or reprocessed data derived from each seismic line used for the survey;
 - (v) a graphical representation of the data mentioned in subparagraph (iv); and
 - (b) if an activity for the survey was carried out by a contractor of the tenure holder, a copy of any report given to the holder by the contractor in relation to the activity.
- (5) In this section—

grid file, for an area, means a representation, on a close-spaced, regular grid, of an interpretation of time and depth to seismic horizons (seismic reflectors).

25 Scientific or technical survey report [P&G, s 40]

- (1) This section applies if the holder of a 1923 Act petroleum tenure—
 - (a) carries out a scientific or technical survey of the area of the tenure; or
 - (b) reprocesses raw data obtained from a survey mentioned in paragraph (a).
- (2) The tenure holder must, not later than 6 months after the completion day for the survey, lodge a scientific or technical survey report for the survey.
- (3) The report must contain each of the following—
 - (a) a description of the location of the area surveyed;
 - (b) a geological summary of the area surveyed;
 - (c) the type of survey carried out;
 - (d) an index of previous scientific or technical surveys, of the same type as the survey for which the report is given, carried out under the tenure within the area;
 - (e) the objectives of the survey;
 - (f) the activities carried out for the survey, including, for example, the days on which the activities were carried out;
 - (g) the methods and equipment used for acquiring and processing, or reprocessing, data;
 - (h) an interpretation of the processed or reprocessed data derived from the survey;
 - (i) a map showing the location of—
 - (i) the area surveyed; and
 - (ii) where any measurements were made or samples were taken in connection with the survey.

- (4) The report must be accompanied by each of the following in digital form—
- (a) the raw data obtained in relation to the survey;
 - (b) the processed or reprocessed data derived from the survey.

Subdivision 5 Petroleum reports

26 Definition for sdiv 5 [P&G, s 41]

In this subdivision—

6 month period, for a 1923 Act petroleum tenure, means a following period in a year during which, for all or part of the period, the tenure is in effect—

- (a) 1 January to 30 June;
- (b) 1 July to 31 December.

27 How particular volumes must be stated in reports [P&G, s 42]

If this subdivision requires a volume of water or a petroleum product to be stated in a report, the volume must be stated as—

- (a) megalitres, for any of the following—
 - (i) water;
 - (ii) LPG;
 - (iii) condensate;
 - (iv) crude oil; or
- (b) millions of cubic metres for gas, including coal seam gas.

28 Petroleum production report—lease [P&G, s 43]

- (1) The holder of a lease must, within 40 business days after the last day of a 6 month period for the lease, lodge a petroleum production report for the period.

- (2) The report must contain each of the following in a form acceptable to the chief executive—
- (a) the number of the lease;
 - (b) an identification of each natural underground reservoir and the reservoir formation (or geological unit) from which petroleum was produced under the lease during the period;
 - (c) each of the following for the 6 month period—
 - (i) the volume of each petroleum product derived from petroleum produced from each natural underground reservoir within the area of the lease;
 - (ii) the volume of petroleum produced under the lease that was flared or vented in a gaseous state;
 - (iii) the volume of petroleum produced under the lease that was used to produce petroleum;
 - (iv) the volume, or an estimate of the volume, of associated water taken under the lease from each natural underground reservoir;
 - (d) the volumes mentioned in paragraph (c)(i) to (iii) for the period starting on the day petroleum was first produced under the lease and ending on the last day of the 6 month period;
 - (e) the volume or estimate mentioned in paragraph (c)(iv) for the period starting on the day associated water was first taken under the lease and ending on the last day of the 6 month period;
 - (f) for each natural underground reservoir from which petroleum was produced under the lease—the number of wells producing petroleum under the lease from the reservoir;
 - (g) for each well drilled for the purpose of producing coal seam gas within the area of the lease, each of the following for associated water taken from the well under the lease during the 6 month period—
 - (i) the volume, or an estimate of the volume, of water taken;

- (ii) the pH of the water on each day during the period on which it was measured;
- (iii) the measurements taken of total dissolved solids (mg/l) in, and the electrical conductivity of, the water during the period.

29 Petroleum reserves report [P&G, s 44]

- (1) This section applies if there are proved and probable reserves of petroleum within the area of a 1923 Act petroleum tenure.
- (2) The holder must, within 40 business days after the last day of a 6 month period for the tenure, lodge a petroleum reserves report for the period.
- (3) The report must contain each of the following in a form acceptable to the chief executive—
 - (a) the type and number of the 1923 Act petroleum tenure;
 - (b) an identification of each natural underground reservoir in which there were proved and probable reserves of petroleum during the period;
 - (c) the volume of the proved and probable reserves of petroleum in each natural underground reservoir within the area of the tenure worked out on the first day and last day of the period.

30 Production testing report [P&G, s 45]

- (1) This section applies if production testing for a well is carried out under a 1923 Act petroleum tenure.
- (2) The holder must, within 40 business days after the last day of a relevant testing period, lodge a production testing report for the period.
- (3) The report must contain each of the following in a form acceptable to the chief executive—
 - (a) the type and number of the tenure;
 - (b) the identifying name of the well;
 - (c) an identification of each natural underground reservoir and the reservoir formation (or geological unit) from

- which petroleum was produced as part of the production testing;
- (d) the duration of the production testing carried out during the period;
 - (e) the type of any perforations in the well and the depth in metres of the top and bottom of the perforated intervals;
 - (f) the volumes, or estimates of the volumes, of gas, oil and water produced from the testing during the period;
 - (g) the choke size used for the well;
 - (h) the density of any oil produced from the testing during the period, measured using the American Petroleum Institute's scale of measuring the specific gravity of oil, commonly known as the 'API gravity' of the oil;
 - (i) the pressure in the well, measured during the period, at which petroleum can not escape from the wellhead for the well, commonly known as the 'shut-in pressure' of the well.
- (4) In this section—
- relevant testing period*** means—
- (a) the period starting on the day production testing for the well first starts and ending on the earlier of—
 - (i) 30 days from the day testing first started; or
 - (ii) the day testing ends; and
 - (b) if the production testing is carried out for more than 30 days—the period starting on the 31st day of testing and ending on the day the testing ends.

Division 3 Other matters relating to records and samples

31 Samples required to be kept [P&G, s 47]

- (1) For section 76A(1)¹¹ of the Act, the samples about the authorised activities carried out under a 1923 Act petroleum tenure that must be kept by the holder are the samples mentioned in sections 32 to 34.
- (2) A sample must be kept until the later of the following—
 - (a) the end of the term of the 1923 Act petroleum tenure;
 - (b) the sample, or part of the sample, is lodged as required under section 76B¹² of the Act.
- (3) A sample must be kept in a way that prevents unnecessary deterioration or loss of the sample.

32 Cutting samples [P&G, s 48]

- (1) A 1923 Act petroleum tenure holder must, for each well drilled under the tenure, keep the cutting samples of the geological formations penetrated by the drill for each interval mentioned in subsection (2).
- (2) For subsection (1), the intervals are—
 - (a) each 10 m interval, or part of a 10 m interval, from the surface to as close as practicable to the top of the geological formation nearest to the surface that is likely to contain a natural underground reservoir; and
 - (b) each 3 m interval, or part of a 3 m interval, from as close as practicable to the top of the geological formation mentioned in paragraph (a) to the bottom of the well.
- (3) However, subsection (2)(a) does not apply in relation to a development well.
- (4) The part of the sample that is lodged as required under section 76B(1) of the Act must be—

11 Section 76A (Requirement to keep records and samples) of the Act

12 Section 76B (Requirement to lodge records and samples) of the Act

- (a) 250 g or more, but not more than 500 g; and
 - (b) washed and dried; and
 - (c) in a container that is suitable for long-term storage and handling and is labelled with each of the following—
 - (i) the identifying name of the well from which the sample was taken;
 - (ii) the depth in metres of the top and bottom of the interval from which the sample was taken.
- (5) In this section—

cutting sample means a sample of the cuttings produced by the drilling of the well.

33 Cores [P&G, s 49]

- (1) A 1923 Act petroleum tenure holder must keep each core recovered from a well under the tenure.
- (2) The part of the core that is lodged as required under section 76B(1) of the Act must—
 - (a) be at least 50% of the core recovered; and
 - (b) have as complete a vertical face as is practicable; and
 - (c) be lodged in a box or other suitable container that is suitable for long-term storage and handling and is labelled with each of the following—
 - (i) the identifying name of the well from which the core was recovered;
 - (ii) if more than 1 core is recovered from the well—the number of the core;
 - (iii) the depth in metres of the top and bottom of the interval cored;
 - (iv) the length in metres of the core recovered.

34 Fluid samples [P&G, s 50]

- (1) This section applies if the holder of a 1923 Act petroleum tenure recovers a sample (a *fluid sample*) of liquid petroleum from a well under the tenure and the sample is more than 10 l.
- (2) If the well is an exploration or appraisal well, the holder must—
 - (a) keep the fluid sample; and
 - (b) lodge, as required under section 76B(1) of the Act, 500 ml or more of the fluid sample.
- (3) If the well is a development well, the holder must, if no fluid sample from the same natural underground reservoir from which the sample is taken has previously been lodged by the holder—
 - (a) keep the fluid sample; and
 - (b) lodge, as required under section 76B(1) of the Act, 500 ml or more of the fluid sample.
- (4) A fluid sample that is lodged as required under section 76B(1) of the Act must be lodged in a glass bottle that is—
 - (a) teflon sealed with a screw top; and
 - (b) labelled with at least the following information—
 - (i) the identifying name of the well;
 - (ii) the depth in metres of the top and bottom of the interval from which the sample was recovered;
 - (iii) the day on which the sample was recovered;
 - (iv) the method by which the fluid sample was recovered.

Examples—

drill stem tests, production tests

35 Confidentiality of required information for 1923 Act petroleum tenure holders [P&G, s 51]

- (1) This section prescribes, for section 76D(1)¹³ of the Act, the confidentiality period for required information for a 1923 Act petroleum tenure.
- (2) The period starts on the day the information is lodged under the Act and ends on the following day—
 - (a) for an annual report required to be lodged under section 76F of the Act—
 - (i) for an authority to prospect—the day that is 2 years after the last day of the period to which the report relates; or
 - (ii) for a lease—the day that is 5 years after the last day of the period to which the report relates;
 - (b) for a well proposal report required to be lodged under section 16(2)(c)(ii)—the day that is 5 years after the day on which the report is required to be lodged;
 - (c) for a daily drilling report required to be lodged under section 21 or a well completion report—
 - (i) for an appraisal well or an exploration well—the day that is 2 years after the day on which the report is required to be lodged; or
 - (ii) for a development well—the day that is 5 years after the day on which the report is required to be lodged;
 - (d) subject to subsection (3), for a well or bore abandonment report—
 - (i) for an appraisal well, exploration well or bore—the day that is 2 years after the day on which the report is required to be lodged; or
 - (ii) for a development well—the day that is 5 years after the day on which the report is required to be lodged;

13 Section 76D (Public release of required information) of the Act

- (e) for a seismic survey report required under section 24 to be lodged—the day that is 2 years after the day on which the report is required to be lodged;
 - (f) for a scientific or technical survey report required under section 25 to be lodged—the day that is 2 years after the day on which the report is required to be lodged;
 - (g) for a petroleum production report required under section 28 to be lodged for a lease—the day that is 6 months after the last day of the period to which the report relates;
 - (h) for a petroleum reserves report required under section 29 to be lodged—the day that is 6 months after the last day of the period to which the report relates;
 - (i) for a production testing report required under section 30 to be lodged—
 - (i) for an authority to prospect—the day that is 2 years after the last day of the period to which the report relates; or
 - (ii) for a lease—the day that is 5 years after the last day of the period to which the report relates;
 - (j) for a cutting sample, core or fluid sample¹⁴ required under section 76B of the Act to be lodged—
 - (i) for an appraisal well or an exploration well—the day that is 2 years after the day on which part of the sample or core is required to be lodged under section 76B of the Act; or
 - (ii) for a development well—the day that is 5 years after the day on which part of the sample or core is required to be lodged under section 76B of the Act.
- (3) There is no confidentiality period for making a well or bore abandonment report for a well available under section 76D(1)(b) of the Act to the holder of a coal or oil shale mining tenement if the well was drilled within the area of the tenement.

14 See also sections 32 (Cutting samples), 33 (Cores) and 34 (Fluid samples).

- (4) There is no confidentiality period for required information not mentioned in subsection (2).

36 Publication of required information [P&G, s 52]

- (1) This section prescribes, for section 76D(1)(a) of the Act, the ways in which the chief executive may publish required information.
- (2) The ways are each of the following—
- (a) in a journal published by the department or under the Minister's authority;
 - (b) in another publication considered appropriate by the chief executive;
 - (c) on the department's web site on the internet;
 - (d) in a publicly available database;
 - (e) on a map that is made available to the public for inspection or purchase;
 - (f) in digital or electronic form, including, for example, on a disc or tape;
 - (g) by displaying it on a notice that is available to the public for inspection at—
 - (i) the department's head office; and
 - (ii) other places the chief executive considers appropriate;
 - (h) by telling it to another person or presenting it to the person in a visual form.

Part 2 Other requirements

37 Plugging and abandoning a well or bore [P&G, s 60]

- (1) For section 75U(4)(a)¹⁵ of the Act a well or bore must be plugged and abandoned in the way stated in schedule 1.
- (2) The safety requirements stated in the *Petroleum and Gas (Production and Safety) Regulation 2004*, sections 69 and 70¹⁶ also apply for plugging and abandoning a well.
- (3) Subsections (1) and (2) apply subject to any exemption granted to the operator under the *Petroleum and Gas (Production and Safety) Regulation 2004*, chapter 3, part 4.¹⁷

38 Requirement to plug shot holes [P&G, s 61]

- (1) The holder of a 1923 Act petroleum tenure must ensure that, if a hole is drilled within the area of the tenure for use as a shot hole—
 - (a) as soon as practicable after the hole is no longer required for use as a shot hole—
 - (i) the hole is plugged with solid material, including, for example, soil, rock or concrete; and
 - (ii) any area around the hole that has been disturbed by the firing of an explosive is restored as far as is practicable to its original state; and
 - (b) if the hole caves in or collapses after it is plugged as required under paragraph (a)—any subsequent damage caused by the hole caving in or collapsing is restored.

Maximum penalty—20 penalty units.

15 Section 75U (Obligation to decommission) of the Act

16 *Petroleum and Gas (Production and Safety) Regulation 2004*, sections 69 (Requirement to remove particular equipment from coal seam) and 70 (Requirement to cement particular voids in a prescribed well)

17 *Petroleum and Gas (Production and Safety) Regulation 2004*, chapter 3 (Safety provisions relating to coal mining), part 4 (Exemptions)

- (2) To the extent the requirement under subsection (1) is inconsistent with a relevant environmental condition for the tenure, the relevant environmental condition prevails.

Chapter 3 Miscellaneous

Part 1 Fees, rents and security

39 Fees generally [P&G, s 133]

- (1) The fees payable under the Act are stated in schedule 2.
- (2) If a fee payable is for a supply for which GST is payable, the fee is to be increased to take account of the GST.

40 Annual rent [P&G, s 145]

- (1) For section 46(1)¹⁸ of the Act, the annual rent for a lease is \$100 for each km² of the area of the lease.
- (2) If annual rent payable is for a supply for which GST is payable, the rent is to be increased to take account of the GST.
- (3) The annual rent must be paid—
 - (a) by cash, cheque or electronic transfer of funds; and
 - (b) on or before each of the following days—
 - (i) for the first year of the lease—the 20th business day after the lease takes effect;
 - (ii) for a later year—each anniversary of the day the lease takes effect.
- (4) If the annual rent for a lease is paid for a year and the lease is surrendered during the year, the proportion of the annual rent that relates to the remainder of the year may be refunded.

18 Section 46 (Annual rent) of the Act

41 Security for 1923 Act petroleum tenures [P&G, s 150]

- (1) For section 78E(2)(a)¹⁹ of the Act, the following forms of security are prescribed—
- (a) cash;
 - (b) cheque;
 - (c) electronic transfer of funds;
 - (d) an unconditional security issued by a financial institution that—
 - (i) is in favour of the ‘State of Queensland’ and is payable on demand; and
 - (ii) has no expiry date; and
 - (iii) states—
 - (A) the type and number of the tenure or proposed tenure; and
 - (B) the address of the financial institution; and
 - (iv) is signed for the financial institution by an officer who has authority to sign the security;
 - (e) a combination of the forms mentioned in paragraphs (a) to (d).
- (2) For section 78E(2)(b) of the Act, the following amounts are prescribed—
- (a) for an authority to prospect or proposed authority to prospect—\$12 000;
 - (b) for a lease or proposed lease—\$35 000.

42 Prescribed interest rates [P&G, s 151]

For section 102(2)²⁰ of the Act, the rate of interest is 15% a year.

19 Section 78E (Power to require security for 1923 Act petroleum tenure) of the Act

20 Section 102 (Interest on amounts owing to the State under this Act) of the Act

Part 2 Other provisions

43 Requirements for petroleum register [P&G, s 154]

For section 80B(1)²¹ of the Act, the information that must be included in the petroleum register for a 1923 Act petroleum tenure is stated in schedule 3.

Chapter 4 Repeal of Petroleum Regulation 1966 and transitional provisions

44 Definitions for ch 4

In this chapter—

commencement means the commencement of section 45.

repealed regulation means the *Petroleum Regulation 1966*.

45 Repeal of Petroleum Regulation 1966

The Petroleum Regulation 1966 is repealed.

46 Continuing effect of notice given under s 114 of repealed regulation

(1) This section applies if—

- (a) a person gave a notice of intention to drill a well under section 114²² of the repealed regulation before the commencement; and
- (b) drilling of the well starts after the commencement.

21 Section 80B (Keeping of register) of the Act

22 Section 114 (Notification before carrying out operations) of the repealed regulation

- (2) The person is taken to have complied with section 16²³ or the *Petroleum and Gas (Production and Safety) Regulation 2004*, section 31,²⁴ as applicable, in relation to the well.
- (3) This section applies despite section 48.

47 Continued application of repealed reporting provisions—events before commencement

- (1) This section applies if—
 - (a) an event occurs before the commencement; and
 - (b) a person is required under the repealed regulation to give a report or notice (a *pre-repeal report or notice*) about the event; and
 - (c) the last day for giving the report or notice is after the commencement.

Example—

A well is completed on 10 December 2004. Under section 126 of the repealed regulation, a well completion report must be given within 6 months after the well is completed.

- (2) The repealed regulation continues to apply in relation to giving the pre-repeal report or notice.
- (3) This regulation, or the *Petroleum and Gas (Production and Safety) Regulation 2004*, does not apply to the extent that it requires a report or notice to be given about the event.

48 Continued application of repealed reporting provisions—events after commencement

- (1) This section applies if—
 - (a) an event happens within 6 months after the commencement; and
 - (b) a report or notice about the event is required to be given under this regulation or the *Petroleum and Gas (Production and Safety) Regulation 2004*.

23 Section 16 (Notice of intention to drill a well or bore)

24 *Petroleum and Gas (Production and Safety) Regulation 2004*, section 31 (Notice of intention to drill a petroleum well or bore)

- (2) If the repealed regulation, as it was immediately before the commencement, provides for a report or notice about the event to be given, a person may comply with a requirement to give a report or notice mentioned in subsection (1)(b) by giving the report or notice provided for under the repealed regulation.
- (3) If the repealed regulation, as it was immediately before the commencement, did not provide for a report or notice about the event to be given, the chief executive may accept a partial report or notice if the chief executive is reasonably satisfied that it would be unreasonably onerous to require a report or notice complying with this regulation or the *Petroleum and Gas (Production and Safety) Regulation 2004*.
- (4) For subsection (3), a ***partial report or notice*** is a report or notice under this regulation or the *Petroleum and Gas (Production and Safety) Regulation 2004* that does not wholly comply with the requirements under the regulation.

Schedule 1 Requirements for plugging and abandoning wells and bores

section 37(1)

Part 1 Preliminary

1 Definitions for sch 1

In this schedule—

prescribed well or bore means a well or bore, other than a horizontal well.

well or bore means a well or bore drilled under a 1923 Act petroleum tenure.

Part 2 Requirements for all wells and bores

2 Abandonment to be consistent with good industry practice

A well or bore must be abandoned in accordance with good industry practice, to the extent that practice is consistent with this regulation.

3 Capping of well or bore

The well or bore must be capped with a metal plate inscribed with the following information—

- (a) the identifying name of the well or bore;
- (b) the total depth in metres of the well or bore;
- (c) the date the well or bore was abandoned.

Schedule 1 (continued)**4 Casing to be sealed**

- (1) The casing of the well or bore must be sealed below ground level.
- (2) The stub of the casing must be buried below the surface at a depth that—
 - (a) allows for later re-entry to the well or bore; and
 - (b) will not adversely interfere with the normal activities of the owner of the land on which the well or bore is located.

Part 3 Additional requirements for wells and bores, other than horizontal wells**5 Isolation of aquifers and porous formations**

An aquifer or porous formation, including, for example, a coal seam, that is intersected by a prescribed well or bore must be isolated so there is no interconnection of gas or water between the aquifers or porous formations.

6 Casing of prescribed well or bore

- (1) Steel casing must be removed from any section of a prescribed well or bore that is within or immediately adjacent to a coal seam.
- (2) However, subsection (1) need not be complied with if it is not technically or commercially feasible to remove the casing.

Example—

production casing that has been cemented in place and can not feasibly be removed

Schedule 1 (continued)

7 Cement to be used for plugs etc.

- (1) A prescribed well or bore must have a surface plug of cement in the casing.
- (2) Also, if a prescribed well or bore has more than 1 casing string and an inner casing string does not reach the surface, the inner casing string must, if required to comply with section 5,²⁵ be plugged with cement at the top of the string.
- (3) Cement used as a plug in a prescribed well or bore must be of an industry accepted grade, having regard to the salinity of the fluids in the surrounding strata.
- (4) A plug in, or adjacent to, a coal seam in a prescribed well or bore must, if reasonably practicable, be adequately secured.
- (5) The operator of the well or bore must test any cement that is used as a plug in the well or bore and ensure that it complies with the requirements under this regulation or the *Petroleum and Gas (Production and Safety) Regulation 2004*.

8 Requirement for packer left in prescribed well or bore

A packer in, or adjacent to, a coal seam in a prescribed well or bore that is not removed from the well or bore must, if reasonably practicable—

- (a) be made of a material that is intrinsically safe; and
- (b) be adequately secured.

9 Fluid to be left in prescribed well or bore

A prescribed well or bore must be left full of fluid that is of sufficient density to—

- (a) help maintain the structural integrity of the well or bore; and
- (b) prevent gas influx.

²⁵ Section 5 (Isolation of aquifers and porous formations)

Schedule 1 (continued)

10 Requirements if steel casing or drill string is left in coal seam

- (1) This section applies if steel casing or drill string is left within a coal seam in a prescribed well or bore.
- (2) The well or bore must be abandoned in a way that assists future entry of the well or bore for the purpose of milling or removing steel from the coal seam.
- (3) In complying with subsection (2), the operator must ensure that each of the following is carried out before the well or bore is plugged and abandoned—
 - (a) sucker rods, pump and tubing and any other debris in the well or bore that can practicably be removed are removed;
 - (b) perforated casing is cemented to ensure all aquifers and porous formations, including for example, coal seams, are isolated as required under section 5;
 - (c) if casing remains in the well or bore, the fluid left in the well or bore as required under section 9—
 - (i) is anticorrosive; and
 - (ii) has corrosion inhibitor added to it if the fluid is or may become corrosive;
 - (d) casing strings are cut off at approximately 1.5 m below ground level and all wellhead equipment is removed;
 - (e) before backfilling, a metal plate is welded fully across the top of the innermost casing string and marker tape is laid approximately 20 cm above the top of the casing;
 - (f) a plaque, stating the following information, is placed on the nearest fence, building or other permanent structure—
 - (i) the identifying name of the well or bore;
 - (ii) the total depth in metres of the well or bore;
 - (iii) the date on which the well or bore was abandoned;

Schedule 1 (continued)

- (iv) the distance and direction to the well or bore from the plaque.

Part 4 Additional requirement for horizontal wells

11 Requirement for liner

- (1) A horizontal well must be abandoned containing a slotted liner that is not made of steel, including for example, a slotted PVC liner.
- (2) However, if the horizontal well has the potential to be a high risk area for future coal mining because of high levels of methane, the operator must conduct a risk assessment that includes an assessment of whether a Fire Resistant Anti Static (or FRAS) liner should be used in the well.

Schedule 2 Fees

section 39(1)

Part 1 1923 Act petroleum tenure fees

	\$
1 Application for approval to amend the work program for an authority to prospect—Act, s 25I(b)	400.00
2 Proposed later work program lodged within the time required under the Act, s 74K(3)—Act, s 74K(6)	400.00
3 Application for renewal of authority to prospect—Act, s 25M(1)(j)(i)	500.00
4 Application for surrender of authority to prospect—Act, s 21(4)(c)(i)	400.00
5 Application for renewal of lease—Act, s 45(2A)(d)(i) . . .	500.00
6 Application for surrender of lease—Act, s 52(1B)(c)(i) . .	400.00
7 Proposed later development plan for lease lodged within the time required under the Act, s 74Q(3)—Act, s 74Q(6)	400.00
8 Application for amendment of relinquishment condition—Act, s 77T(1)(h)	400.00

Schedule 2 (continued)

Part 2 Transfer fees

	\$
1 Transfer of water observation bore or water supply bore within the area of a 1923 Act petroleum tenure to the landowner—Act, s 75Q(2)(d)	150.00
2 Transfer of well within the area of a 1923 Act petroleum tenure to the holder of a geothermal exploration permit or a mining tenement—Act, s 75R(b)	150.00
3 Transfer of a water observation bore within the area of a 1923 Act petroleum tenure to the holder of another 1923 Act petroleum tenure or a 2004 Act petroleum tenure—Act, s 75S(b)	150.00

Part 3 General fees

	\$
1 Fee for required information for a 1923 Act petroleum tenure made available by the chief executive—Act, s 76D(1)(b)—	
(a) for information made available in an electronic form, other than on a tape cartridge	115.00
(b) for information made available on a tape cartridge	230.00
2 Fee for a copy of all or part of a notice, document or information in the petroleum register—Act, s 80C(c)—	
(a) for a copy of a standard departmental public tenure enquiry report	9.30
(b) otherwise	45.60
3 Request fee—Act, s 80H(3)	100.00
4 Application for approval of dealing—Act, s 80I(2)(c)(iii)	100.00

Schedule 3 Requirements for petroleum register

section 43

1 All 1923 Act petroleum tenures

The petroleum register must contain each of the following for a 1923 Act petroleum tenure—

- (a) the tenure type and number;
- (b) the full name of the holder of the tenure, including, if there is more than 1 holder, the share held by each holder;
- (c) the postal address of—
 - (i) the holder; or
 - (ii) if the holder has nominated another person as the holder's address for service for the Act—the nominated person;²⁶
- (d) the following days—
 - (i) the day the holder applied for the tenure;
 - (ii) the day the tenure was granted;
 - (iii) the day the tenure took effect;
 - (iv) the last day of the current term of the tenure;
 - (v) if the tenure is renewable—the earliest day on which an application to renew the tenure may be made;
- (e) a general description of the location of the area of the tenure;
- (f) any permitted dealings for the tenure—
 - (i) for which the Minister has given an indication

²⁶ See also section 129 (Name and address for service) of the Act

Schedule 3 (continued)

under section 80H²⁷ of the Act; or

- (ii) that are approved by the Minister.

2 Additional matters for an authority to prospect

The petroleum register must also contain each of the following additional matters for an authority to prospect—

- (a) a list of the sub-blocks of the authority when it was granted;
- (b) the number of sub-blocks of the authority immediately after the most recent relinquishment of any part of the area of the authority;
- (c) the number of original notional sub-blocks of the authority;
- (d) the relinquishment days for the authority;
- (e) the day on which any relinquishment notice is lodged by the holder and the number of blocks and sub-blocks relinquished;
- (f) a summary of the work program, including any dates provided for in the program on which activities to be carried out under the authority are to be completed;
- (g) the day the work program expires;
- (h) if a well is drilled under the authority—the identifying name of the well;
- (i) if a seismic survey or scientific or technical survey is carried out under the authority—the identifying name or code for the survey;
- (j) any conditions or provisions of the authority, other than the mandatory conditions for authorities to prospect.

²⁷ Section 80H (Minister may give indication for proposed permitted dealing) of the Act

Schedule 3 (continued)**3 Additional matters for a lease**

The petroleum register must also contain each of the following additional matters for a lease—

- (a) a list of the sub-blocks, or a description of the area, and the total area (km²) of the lease when it was granted;
- (b) the number of sub-blocks, or a description of the area, and the total area (km²) of the lease immediately after the most recent relinquishment of any part of the area of the lease;
- (c) if the lease is subject to a relinquishment condition—the relinquishment days;
- (d) the day on which any relinquishment notice is lodged by the holder and the number of sub-blocks relinquished;
- (e) the day the development plan expires;
- (f) for coordination arrangement made by the holder and approved by the Minister—
 - (i) the day the arrangement was approved; and
 - (ii) the number of the lease, 2004 Act lease or mining lease to which the arrangement relates;
- (g) if a coordination arrangement mentioned in paragraph (f) is cancelled by, or with the approval of, the Minister—the day the arrangement is cancelled;
- (h) if a well is drilled under the lease—the identifying name of the well;
- (i) if a seismic survey or scientific or technical survey is carried out under the lease—the identifying name or code for the survey;
- (j) any conditions or provisions of the lease, other than the mandatory conditions for leases.

Schedule 4 Dictionary

section 3

6 month period, for chapter 2, part 1, division 2, subdivision 5, see section 26.

appraisal well means a well that is drilled to test the potential of 1 or more natural underground reservoirs for producing petroleum.

associated water means water necessarily taken as part of petroleum production under a 1923 Act petroleum tenure.

bore means a water observation bore or a water supply bore.

commencement, for chapter 4, see section 44.

completion day, for a survey, means—

- (a) if the survey involves reprocessing of raw data recorded or recovered for a previous survey—the day on which reprocessing of the data is completed; or
- (b) otherwise—the last day on which raw data is recorded or recovered for the survey.

condensate means liquid formed as a result of condensation caused by reduced pressure and temperature of hydrocarbons in a gaseous state in a natural underground reservoir.

development well means a well that is drilled to produce petroleum.

directional well means a part of a well that is intentionally not drilled vertically.

exploration well means a well that is drilled to—

- (a) explore for the presence of petroleum; or
- (b) obtain stratigraphic information for the purpose of exploring for petroleum.

general area information, for chapter 2, part 1, division 1, see section 5.

geological summary, of an area, means a summary of—

Schedule 4 (continued)

- (a) the major structural and stratigraphic features of the area; and

Examples—

- the history of the accumulation and structuring of stratigraphic units
- the timing of structural and metamorphic events

- (b) the geophysical features of the area.

Examples—

the gravitational and magnetic potential fields

hazard means a thing or situation with potential to cause harm to any of the following—

- (a) a person, including, for example, financial losses or increased liabilities;
- (b) property;
- (c) the environment.

hazard information, for chapter 2, part 1, division 1, see section 5.

horizontal well means a well, any part of which travels in a generally horizontal direction along a coal seam.

identifying name—

- (a) for a bore, means a number by which the bore is identified in the Groundwater Database System operated by the chief executive of the department responsible for administering the *Water Act 2000*; or
- (b) for a well, means the unique identifying name for the well recorded in the petroleum register.

lead means a potential prospect that is, in the reasonable opinion of a 1923 Act petroleum tenure holder, indicated by the available seismic or other data.

operator has the meaning given under the 2004 Act, section 673.²⁸

Schedule 4 (continued)

other underground water means water taken for use in carrying out authorised activities under a 1923 Act petroleum tenure.

petroleum product means any of the following—

- (a) coal seam gas;
- (b) condensate;
- (c) crude oil;
- (d) LPG;
- (e) processed natural gas.

production testing means testing for petroleum production from a well within the area of the 1923 Act petroleum tenure.

prospect means a geological structure, such as an anticline—

- (a) that, in the reasonable opinion of a 1923 Act petroleum tenure holder based on a seismic survey or other data, is likely to contain a quantity of petroleum suitable for commercial production; and
- (b) from which petroleum has not yet been commercially produced.

proved and probable reserves, of petroleum or a petroleum product, has the meaning given under the SPE code.

repealed regulation, for chapter 4, see section 44.

reporting period, for chapter 2, part 1, division 1, see section 5.

rig release day, for a well, means the day the drilling rig last used to drill the well is moved so it is no longer above the well, if the 1923 Act petroleum tenure holder intends no further drilling of the well to occur.

scientific or technical survey means a geophysical, geochemical or geotechnical survey or another survey for a similar purpose, other than a seismic survey.

seismic survey means a survey carried out to determine the subsurface features by transmitting sound waves into the

Schedule 4 (continued)

ground and measuring the time they take to return to the surface.

shot hole means a hole that has been drilled for the purpose of firing an explosive in connection with carrying out a seismic survey.

SPE code means—

- (a) the document called ‘Petroleum Reserves Definitions’ published in 1997 by the Society of Petroleum Engineers and the World Petroleum Congresses; and
- (b) the document called ‘Petroleum Resources Definitions’ published in 2000 by the Society of Petroleum Engineers, the World Petroleum Congresses and the American Association of Petroleum Geologists.

status, of a well or bore, means any of the following that describes the well or bore—

- (a) for a well that is producing petroleum or a water supply bore that is in use—producing;
- (b) for a well that has temporarily stopped producing petroleum—shut in;
- (c) for a well that is capable of producing petroleum but the productive interval in the well has not been completed for production—cased and suspended;
- (d) for a water observation bore that has not been plugged and abandoned—in use;
- (e) for a well or bore that has been plugged and abandoned—plugged and abandoned;
- (f) for a well that has been converted to a water observation bore—converted to a water observation bore;
- (g) for a well that has been converted to a water supply bore—converted to a water supply bore;
- (h) for a well that has been converted to a Water Act bore—converted to a Water Act bore.

stimulation means a technique used to increase the permeability of a natural underground reservoir, including, for

Schedule 4 (continued)

example, hydraulic fracturing, cavitations, fracture acidising, and the use of proppant treatments.

tenure information, for chapter 2, part 1, division 1, see section 5.

well completion report means a well completion report required under section 22 to be lodged for a well.

well or bore abandonment report means a well or bore abandonment report required under section 23 to be lodged for a well or bore.

ENDNOTES

- 1 Made by the Governor in Council on 16 December 2004.
- 2 Notified in the gazette on 17 December 2004.
- 3 Laid before the Legislative Assembly on . . .
- 4 The administering agency is the Department of Natural Resources and Mines.