



Queensland

*Greenhouse Gas Storage Act 2009*

# Greenhouse Gas Storage Regulation 2010

Reprinted as in force on 1 September 2012

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Queensland

# Greenhouse Gas Storage Regulation 2010

## Contents

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		Page
<b>Part 1</b>	<b>Preliminary</b>	
<b>Division 1</b>	<b>Introduction</b>	
1	Short title .....	5
<b>Division 2</b>	<b>Interpretation</b>	
2	Dictionary .....	5
<b>Part 2</b>	<b>Prescribed requirements for work programs and development plans</b>	
3	Proposed initial work program .....	5
4	Proposed initial development plan .....	6
5	Proposed GHG lease—site plan requirements .....	6
<b>Part 3</b>	<b>Prescribed requirements for test plans</b>	
6	Requirements for proposed test plan .....	7
<b>Part 4</b>	<b>Reporting</b>	
7	Prescribed information for relinquishment report for GHG permit	8
8	Prescribed information for end of tenure report .....	10
9	Prescribed information for surrender report .....	10
<b>Part 5</b>	<b>Other notices and reports</b>	
<b>Division 1</b>	<b>Preliminary</b>	
10	Purpose of pt 5 .....	11
<b>Division 2</b>	<b>Notices</b>	
11	Notice of intention to drill a GHG well. ....	11
12	Notice of completion, alteration or abandonment of a GHG well .	12
13	Notice of intention to carry out seismic survey or scientific or technical survey .....	13
14	Notice of completion of seismic survey or scientific or technical survey .....	13
<b>Division 3</b>	<b>Well reports</b>	
15	Daily drilling report .....	14

## Contents

16	Well completion report . . . . .	15
17	Well abandonment report . . . . .	17
<b>Division 4</b>	<b>Survey reports</b>	
18	Seismic survey report. . . . .	20
19	Scientific or technical survey report . . . . .	22
<b>Division 5</b>	<b>GHG reports</b>	
20	Definition for div 5. . . . .	23
21	How particular volumes must be stated in reports . . . . .	23
22	GHG storage injection testing report . . . . .	24
23	GHG stream storage capacity report . . . . .	25
24	GHG stream storage injection report . . . . .	25
<b>Part 6</b>	<b>Matters relating to records and samples</b>	
25	Prescribed samples required to be kept. . . . .	26
26	Cutting samples . . . . .	27
27	Core samples . . . . .	28
28	Fluid samples . . . . .	28
<b>Part 7</b>	<b>Confidentiality and publication of required information</b>	
29	Prescribed confidentiality period for GHG authority holders . . . .	29
30	Prescribed ways of publishing required information. . . . .	30
<b>Part 8</b>	<b>Miscellaneous</b>	
31	Annual rent . . . . .	31
32	Security for GHG authorities . . . . .	31
33	Prescribed interest rates . . . . .	32
34	Requirements for GHG register . . . . .	32
35	Fees . . . . .	33
<b>Schedule 1</b>	<b>Annual rent</b> . . . . .	34
<b>Schedule 2</b>	<b>Requirements for GHG register</b> . . . . .	35
1	All GHG authorities. . . . .	35
2	Additional matters for a GHG permit . . . . .	36
3	Additional matters for a GHG lease . . . . .	36
<b>Schedule 3</b>	<b>Fees</b> . . . . .	38
<b>Schedule 4</b>	<b>Dictionary</b> . . . . .	40
 <b>Endnotes</b>		
1	Index to endnotes. . . . .	42

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2	Date to which amendments incorporated . . . . .	42
3	Key . . . . .	42
4	Table of reprints . . . . .	43
5	List of legislation . . . . .	43
6	List of annotations . . . . .	44



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# Greenhouse Gas Storage Regulation 2010

[as amended by all amendments that commenced on or before 1 September 2012]

## Part 1 Preliminary

### Division 1 Introduction

#### 1 Short title

This regulation may be cited as the *Greenhouse Gas Storage Regulation 2010*.

### Division 2 Interpretation

#### 2 Dictionary

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

## Part 2 Prescribed requirements for work programs and development plans

### 3 Proposed initial work program

For section 53(1)(g) of the Act, the prescribed matters are each of the following—

[s 4]

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

#### **4 Proposed initial development plan**

For section 141(1)(g) of the Act, the prescribed matters are—

- (a) any likely conflict between an authorised activity for the proposed GHG lease and an authorised activity for an authority, however called, under the Geothermal Act, Mineral Resources Act, P&G Act or 1923 Act; and
- (b) details, including the location, type and size, of any planned infrastructure intended to be located within the area of the 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

#### **5 Proposed GHG lease—site plan requirements**

For section 142(3) of the Act, the site plan must show the following information for the GHG stream storage site—

- (a) details of, and the impacts GHG stream storage may have on any—
  - (i) petroleum wells, other than a petroleum well mentioned in the Act, section 143, that intersect or may intersect the site; and
  - (ii) water bores that intersect or may intersect the site;



- (b) how the impacts on petroleum wells or water bores mentioned in paragraph (a) will be prevented or mitigated.

## **Part 3                      Prescribed requirements for test plans**

### **6                      Requirements for proposed test plan**

For sections 80(3) and 161(3) of the Act, a proposed test plan must include the following information—

- (a) where and how the proposed GHG storage injection testing will be carried out;
- (b) details of the substance proposed to be injected, including—
  - (i) whether the substance is composed of GHG stream or water;
  - (ii) if a GHG stream is proposed to be injected—information about the composition of the GHG stream; and
  - (iii) the proposed volume of the substance to be injected; and
  - (iv) the proposed rate of injection of the substance; and
  - (v) the expected migration pathway of the substance following injection;
- (c) the operations and techniques to be used to monitor and verify the behaviour of the substance during testing;
- (d) an assessment of whether there is any risk to public health or the environment associated with the proposed injection testing;
- (e) how any risks mentioned in paragraph (d) will be mitigated.

[s 7]

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## Part 4 Reporting

### 7 Prescribed information for relinquishment report for GHG permit

- (1) For section 255(1)(b) of the Act, the following information is prescribed—
  - (a) the permit information for the report;
  - (b) the general area information for the report;
  - (c) if the relinquished part of the area of the GHG permit (the *relinquished area*) has been used for GHG storage injection testing—
    - (i) a description of the methods used for the testing; and
    - (ii) information about the substance injected for the testing, including the volume of water or GHG stream injected;
  - (d) a geological model of the relinquished area and an assessment of the potential for discovering a GHG stream storage site in the area;
  - (e) a summary of the results of all authorised activities for the GHG permit carried out in the relinquished area since the permit took effect, and the conclusions drawn by the holder based on the results;
  - (f) an index of all reports given to the Minister or chief executive, as required under the Act, for the authorised activities for the permit carried out in the relinquished area;
  - (g) the hazard information for the report;
  - (h) the volume of water produced from each GHG well or water bore in the relinquished area for each year since the GHG permit took effect;
  - (i) for GHG wells made in the relinquished area since the permit took effect—all data or other information held by

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the holder that, in the holder's reasonable opinion, may help a person to identify in the future any use that may be made of the well;

(j) the reason the holder has relinquished the area.

(2) In this section—

***general area information***, for a relinquishment report for a GHG permit, means each of the following—

(a) a map showing—

(i) the area of the permit immediately before the relinquishment (the ***previous permit area***); and

(ii) the relinquished area;

(b) a map showing the location in the relinquished area of—

(i) all GHG wells and water bores;

(ii) each seismic line used for a seismic survey carried out under the permit;

(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 permit area and the relinquished area, including, for example, access to the areas.

***permit information***, for a relinquishment report for a GHG permit, means each of the following—

(a) the day the permit was granted;

(b) the day the relinquishment takes effect;

(c) the period of the work program for the GHG permit;

(d) the blocks or sub-blocks that make up the relinquished area.

[s 8]

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## **8 Prescribed information for end of tenure report**

- (1) This section prescribes, for section 256(b) of the Act, other information that must be stated in an end of tenure report.
- (2) The information is any information mentioned in section 7 or, for an end of tenure report for a GHG lease, section 9, that is not mentioned in section 256(a) of the Act.
- (3) For subsection (2)—
  - (a) a reference in section 7 to the relinquished area is taken to be a reference to the area of the tenure immediately before it ended; and
  - (b) a reference in section 9 to the GHG lease being surrendered is taken to be a reference to the tenure immediately before it ended.
- (4) Subsection (2) does not apply to the extent the information mentioned in section 7 or 9 has already been included in a relinquishment report or surrender report given for the tenure.

## **9 Prescribed information for surrender report**

For section 177(2)(g) of the Act, the following information is prescribed—

- (a) information about the amount and location of GHG stream storage carried out in, and water produced from, the area of the GHG lease;
- (b) any information related to information mentioned in paragraph (a) that may help the understanding of the size or amount and location of any GHG stream storage sites in, or water that may be produced from, the area of the GHG lease;
- (c) a description of the geological features of each GHG stream storage reservoir in the area of the lease in which a GHG stream has been stored;
- (d) a description of the methods used to store each GHG stream;
- (e) the hazard information for the report;

- (f) how the impacts or potential impacts on petroleum wells or water bores that intersect GHG stream storage sites in the area of the lease have been mitigated or prevented;
- (g) an index of all reports given to the Minister or chief executive, as required under the Act, for the authorised activities carried out in the area of the GHG lease;
- (h) any information required to be reported under the Act for the GHG lease that has not been previously reported.

## **Part 5                      Other notices and reports**

### **Division 1                Preliminary**

#### **10        Purpose of pt 5**

This part prescribes, for section 257(1)(b) of the Act, notices and reports required to be given to the chief executive by the holder of a GHG authority.

### **Division 2                Notices**

#### **11        Notice of intention to drill a GHG well**

- (1) The holder of a GHG tenure must, at least 5 business days before drilling of a GHG well under the tenure starts, give the chief executive a notice stating that the well is to be drilled.
- (2) The notice must—
  - (a) state a proposed identifying name for the GHG well; and
  - (b) be given to the chief executive in the required way for giving reports to the chief executive under the Act.

[s 12]

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- (3) The proposed identifying name must not be the same, or substantially the same, as a name recorded for a GHG well in the GHG register or a prescribed well in the petroleum register under the P&G Act or the 1923 Act.

## 12 Notice of completion, alteration or abandonment of a GHG well

- (1) This section applies if—
  - (a) drilling of a GHG well is completed; or
  - (b) the completion configuration of a GHG well changes; or
  - (c) a GHG well is abandoned.
- (2) For subsection (1)—
  - (a) drilling of a GHG well is completed if—
    - (i) the drilling rig last used to drill the well is moved so it is no longer above the well; and
    - (ii) the relevant holder intends no further drilling of the well to happen; and
  - (b) the completion configuration of a GHG 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 relevant holder must, within 10 business days after the event mentioned in subsection (1) happens, give the chief executive a notice stating that the event has happened.
- (4) The notice must be given to the chief executive in the required way for giving reports to the chief executive under the Act.
- (5) In this section—

**relevant holder** means the holder of the GHG tenure under which the GHG well was drilled.

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**13 Notice of intention to carry out seismic survey or scientific or technical survey**

- (1) This section applies if a seismic survey or a scientific or technical survey is to be carried out in—
  - (a) the area of a GHG tenure; or
  - (b) the area subject to a GHG data acquisition authority relating to a GHG tenure.
- (2) The authority holder must, at least 10 business days before the survey starts, give the chief executive 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 the name or code for another survey recorded in the GHG register or the petroleum register under the P&G Act or the 1923 Act.

**14 Notice of completion of seismic survey or scientific or technical survey**

- (1) This section applies if a seismic survey or a scientific or technical survey carried out within the area of a GHG tenure, or the area subject to a GHG data acquisition authority relating to the tenure, is completed.

[s 15]

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- (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 authority holder must, within 10 business days after the completion day for the survey, give the chief executive a notice stating that the survey has been completed.
- (4) The notice must be in the approved form.

## **Division 3            Well reports**

### **15        Daily drilling report**

- (1) A GHG tenure holder must keep a daily drilling report for each day on which drilling of a GHG well is carried out under the tenure.
- (2) The report must contain each of the following for 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;



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- (k) a description of any drill stem tests or other tests carried out in the well;
  - (l) the type of any perforations in the well and the depth in metres of the top and bottom of the perforated intervals;
  - (m) details of any squeeze cementing or cement plugging carried out;
  - (n) a description of any cores or cutting samples taken.
- (3) In this section—

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

## 16 Well completion report

- (1) A GHG tenure holder must give the chief executive, in the required way, a well completion report for a GHG well drilled under the tenure.
- (2) The report must be given within 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 GHG 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 reasons for the location of the well with reference to the geological structure of the surrounding area;
  - (h) a copy of each daily drilling report for the well;
  - (i) the ground level and kelly bushing level in metres for the well;
  - (j) the total depth in metres of the well;

[s 16]

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- (k) 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;
- (l) details of the drilling rig, the number and type of drill bits, and the drilling fluids, used to drill the well;
- (m) the status of the well on the rig release day;
- (n) the surveyed path of the well;
- (o) details of the casing and equipment installed in the well, with a diagram showing their location in the well;
- (p) the type of any perforations in the well and the depth in metres of the top and bottom of the perforated intervals;
- (q) 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;
- (r) a description of all tests or surveys carried out for drilling the well;
- (s) a geological interpretation of the well, including the stratigraphy of the rock units it intersects;
- (t) an identification of the intervals intersected by the well that have the potential for GHG stream storage;
- (u) an assessment of—
  - (i) the relevance of the well to the GHG stream storage potential within the vicinity of the well; and
  - (ii) the implications of the well for the future management of any GHG storage reservoir to which the well relates;
- (v) a description of each geological sample taken during the drilling of the well, including the depth in metres at which the sample was taken and the results of any analysis carried out for the sample;

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*Examples of geological samples—*

conventional cores and fluid samples, cuttings, sidewall cores

- (w) 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 the following—
    - (i) another GHG well;
    - (ii) a petroleum well;
    - (iii) an exploration bore under the Geothermal Act.
- (5) For subsection (4), the position must be expressed using—
  - (a) the 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.

## **17 Well abandonment report**

- (1) If a GHG well is plugged and abandoned, the relevant GHG tenure holder must give the chief executive, in the required way, a well abandonment report—

[s 17]

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- (a) for a GHG 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 16; or
  - (b) otherwise—within 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 relevant GHG tenure;
    - (ii) the identifying name of the well;
    - (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;
    - (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, including a location map and the date on which a well completion report for the well was given to the chief executive;
  - (c) the following details about the well—
    - (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—
      - (A) a coal seam;
      - (B) a natural underground reservoir under the P&G Act;
      - (C) an aquifer;
    - (iii) the depth in metres of any perforations in the casing of the well;
    - (iv) the type of drilling rig used to drill the well;
  - (d) all surveys and measurements made in the well, including any detailed interpretation of a survey or measurement;

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- (e) for the completion or abandonment of the well, each of the following—
- (i) details of the casing and equipment installed in the well, with diagrams showing the major dimensions and features of the casing and equipment;
  - (ii) a full description of all equipment, including prescribed equipment, retained in the well, including, for example, the size and nature of the equipment and any features of the equipment that may cause a hazard to underground mining operations;  
*Example of features that may cause a hazard to underground mining operations—*  
aluminium, batteries or electronics
  - (iii) the surveyed location of any prescribed equipment;
  - (iv) the method of the cementing operations carried out in or on the well, including, for example, 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;
  - (vii) any other details of the activities carried out in drilling, completing and plugging and abandoning the well, and an assessment of their possible impacts, that would assist a person in making an assessment of potential risks to safe and efficient underground mining.
- (3) For subsection (2)(c)(ii), the position at the top and bottom of the coal seam, natural underground reservoir or aquifer must be expressed using—
- (a) for a directional well—

[s 18]

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- (i) the total vertical depth in metres; and
  - (ii) the horizontal plane; or
- (b) otherwise—the depth in metres.
- (4) In this section—
- completion day*** means the day on which plugging and abandoning of the well is completed.
- prescribed equipment*** means—
- (a) metal equipment, other than casing; and
  - (b) any other equipment that may create a hazard to underground mining operations.
- Examples of metal equipment—*
- drilling equipment, geophysical logging tools

## **Division 4                      Survey reports**

### **18            Seismic survey report**

- (1) This section applies if the holder of a GHG authority—
  - (a) carries out a seismic survey of the area of the authority; or
  - (b) reprocesses raw data obtained from a survey mentioned in paragraph (a).
- (2) The authority holder must, within 12 months after the completion day for the survey, give the chief executive in the required way 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 authority 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
    - (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, in digital form, by—
- (a) each of the following—
    - (i) the raw data obtained from 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;

[s 19]

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- (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 authority holder, a copy of any report given to the holder by the contractor for 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).

## 19 Scientific or technical survey report

- (1) This section applies if the holder of a GHG authority—
  - (a) carries out a scientific or technical survey of the area of the authority; or
  - (b) reprocesses raw data obtained from a survey mentioned in paragraph (a).
- (2) The authority holder must, within 6 months after the completion day for the survey, give the chief executive in the required way 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 authority 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 from the survey;
  - (b) the processed or reprocessed data derived from the survey.

## **Division 5                    GHG reports**

### **20            Definition for div 5**

In this division—

*6 month period*, for a GHG authority, means a following period in a year during which, for all or part of the period, the authority is in effect—

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

### **21            How particular volumes must be stated in reports**

- (1) Subsection (2) applies if this division requires a volume of any of the following to be stated in a report—
  - (a) water;

[s 22]

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- (b) a GHG stream.
- (2) The volume must be stated as—
  - (a) for water—megalitres; or
  - (b) for a GHG stream—millions of cubic metres.

## **22 GHG storage injection testing report**

- (1) This section applies if GHG storage injection testing for an underground geological formation or structure is carried out under a GHG tenure.
- (2) The tenure holder must, within 40 business days after the GHG storage injection testing ends, give the chief executive in the required way a GHG storage injection testing report for the testing.
- (3) The report must contain each of the following—
  - (a) the type and number of the tenure;
  - (b) for the GHG well used for testing—
    - (i) the identifying name of the well; and
    - (ii) the type of any perforations in the GHG well and the depth in metres of the top and bottom of the perforated intervals; and
    - (iii) the choke size used for the well;
  - (c) an identification of each underground geological formation or structure into which a GHG stream or water was injected as part of the testing;
  - (d) the duration of the testing;
  - (e) details of the substance injected, including—
    - (i) whether the substance is composed of GHG stream or water; and
    - (ii) if a GHG stream was injected—information about the composition of the GHG stream; and
    - (iii) the volume of the substance injected; and

- (iv) the rate at which the substance was injected; and
- (v) the observed migration pathway of the substance following injection;
- (f) the operations and techniques being used to monitor and verify the behaviour of the substance injected;
- (g) an assessment of risks to public health or the environment associated with the testing;
- (h) how the risks mentioned in paragraph (d) are being mitigated.

### **23 GHG stream storage capacity report**

- (1) This section applies if there are GHG storage reservoirs within the area of a GHG tenure.
- (2) The GHG tenure holder must, within 40 business days after the last day of a 6 month period for the tenure, give the chief executive in the required way a GHG stream storage capacity report for the tenure for the period.
- (3) The report must contain each of the following—
  - (a) the type and number of the GHG tenure;
  - (b) an identification of each GHG storage reservoir in which there is available capacity to store a GHG stream;
  - (c) the estimated volume of storage capacity in each GHG storage reservoir within the area of the tenure worked out on the first day and last day of the period.

### **24 GHG stream storage injection report**

- (1) A GHG lease holder must, within 40 business days after the last day of a 6 month period for the lease, give the chief executive in the required way a GHG stream storage injection report for the period.
- (2) The report must contain each of the following—
  - (a) the number of the lease;

[s 25]

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- (b) an identification of each GHG stream storage site into which a GHG stream or water was injected under the lease for the 6 month period;
- (c) the volume of GHG stream injected into each GHG storage site within the area of the lease for the 6 month period;
- (d) for each GHG storage reservoir into which a GHG stream is injected under the lease—the number of GHG wells injecting a GHG storage stream into the reservoir;
- (e) the operations and techniques being used to monitor and verify the behaviour of the GHG streams injected into each GHG storage reservoir;
- (f) an assessment of whether there is a risk of a serious situation arising for any GHG stream storage site under the lease;
- (g) an assessment of any risks to public health or the environment associated with GHG stream storage under the lease;
- (h) how any risks mentioned in paragraph (g) are being mitigated.

## **Part 6                                      Matters relating to records and samples**

### **25        Prescribed samples required to be kept**

- (1) For section 258(1) of the Act, the prescribed samples about authorised activities carried out under a GHG tenure that must be kept by the holder are the samples mentioned in sections 26 to 28.
- (2) A sample must be kept until the later of the following—
  - (a) the end of the term of the GHG tenure;

- 
- (b) the sample, or part of the sample, is given to the chief executive as required under section 259 of the Act.
  - (3) A sample must be kept in a way that prevents unnecessary deterioration or loss of the sample.

## 26 Cutting samples

- (1) A GHG tenure holder must, for each GHG 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 10m interval, or part of a 10m 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 GHG storage reservoir; and
  - (b) each 3m interval, or part of a 3m interval, from as close as practicable to the top of the geological formation mentioned in paragraph (a) to the bottom of the well.
- (3) The part of the sample given to the chief executive under section 259(1) of the Act must be—
  - (a) 250g or more, but not more than 500g; 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 GHG 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.
- (4) In this section—

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

[s 27]

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## 27 Core samples

- (1) A GHG tenure holder must keep each core recovered from a GHG well under the GHG tenure.
- (2) The part of the core that is given to the chief executive as required under section 259(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 given in a box or other container that is suitable for long-term storage and handling and is labelled with each of the following—
    - (i) the identifying name of the GHG 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.

## 28 Fluid samples

- (1) This section applies if the holder of a GHG tenure recovers a sample (a *fluid sample*) of liquid petroleum from a GHG well under the tenure and the sample is more than 10L.
- (2) The tenure holder must—
  - (a) keep the fluid sample; and
  - (b) give the chief executive, as required under section 259(1) of the Act, 500ml or more of the fluid sample.
- (3) A fluid sample given to the chief executive under section 259(1) of the Act must be given 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;



[s 30]

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- (e) for a GHG stream storage capacity report given under section 23—the day that is 6 months after the last day of the period to which the report relates;
  - (f) for a GHG stream storage injection report given under section 24 for a GHG lease—the day that is 6 months after the last day of the period to which the report relates;
  - (g) for a cutting sample, core or fluid sample given under section 259 of the Act—the second anniversary of the giving of the sample or core.
- (3) However, there is no confidentiality period for making a GHG well abandonment report for a GHG well available under section 261(1)(b) of the Act to the holder of a coal or oil shale mining tenement under the Mineral Resources Act if the well was drilled within the area of the tenement.
- (4) There is no prescribed confidentiality period for required information not mentioned in subsection (2).

### **30 Prescribed ways of publishing required information**

- (1) This section prescribes, for section 261(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 website;
  - (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 8                      Miscellaneous**

### **31            Annual rent**

- (1) The annual rent payable for GHG authorities is stated in schedule 1.
- (2) The annual rent for a GHG authority, or a pro-rata amount of the annual rent if the period to which the rent relates is less than a year, must be paid on or before each of the following days—
  - (a) on the grant of the authority, if the Minister has not already required payment of the rent—the 20th business day after the authority takes effect;
  - (b) otherwise—on or before 31 August each year.
- (3) The annual rent must be paid by cash, cheque or electronic transfer of funds.
- (4) If the annual rent for an authority mentioned in subsection (1) is paid for a year and the authority ends during the year, the proportion of the annual rent that relates to the remainder of the year may be refunded.

### **32            Security for GHG authorities**

- (1) For section 271(2)(a) of the Act, the following forms of security are prescribed—

[s 33]

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- (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 the type and number of the petroleum authority or proposed petroleum authority; and
    - (iv) states the address of the financial institution; and
    - (v) 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 271(2)(b) of the Act, the following amounts are prescribed—
- (a) for a GHG permit or proposed GHG permit—\$12792;
  - (b) for a GHG lease or proposed GHG lease—\$37311;
  - (c) for a GHG data acquisition authority or proposed GHG data acquisition authority—\$11193.

### **33 Prescribed interest rates**

For section 372 of the Act, the rate of interest is 15% a year.

### **34 Requirements for GHG register**

For section 340(1) of the Act, the information that must be included in the GHG register for a GHG authority is stated in schedule 2.

**35 Fees**

The fees payable under the Act are stated in schedule 3.

## **Schedule 1      Annual rent**

section 31

	<b>\$</b>
1    Annual rent for GHG permit (for each sub-block included in the area of the permit)—Act, s 86(1) . . . . .	2.43
2    Annual rent for GHG lease (for each square kilometre or part of a square kilometre of the area for the lease)—Act, s 168(1) . . . . .	126.90
3    Annual rent for GHG data acquisition authority (for each sub-block included in the area of the authority)—Act, s 243(1) . . . . .	2.43

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## Schedule 2 Requirements for GHG register

## section 34

### 1 All GHG authorities

The GHG register must contain each of the following for each GHG authority—

- (a) the authority type and number;
- (b) the full name of the holder of the authority, 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;

*Editor's note—*

See also section 421 (Name and address for service) of the Act.

- (d) the following days—
  - (i) the day the holder applied for the authority;
  - (ii) the day the authority was granted;
  - (iii) the day the authority took effect;
  - (iv) the last day of the current term of the authority;
  - (v) if the authority is renewable—the earliest day on which an application to renew the authority may be made;
- (e) a general description of the location of the area of the authority;
- (f) any dealings relating to the authority that have been approved by the Minister;

- (g) if a seismic survey or scientific or technical survey is carried out under the authority—the identifying name or code for the survey.

## **2 Additional matters for a GHG permit**

The GHG register must also contain each of the following additional matters for a GHG permit—

- (a) the tender details for the call for tender;
- (b) the relinquishment days for the permit;
- (c) for a potential storage area declared for the permit, each of the following—
  - (i) a list of the sub-blocks for which the area is declared;
  - (ii) the day the Minister made the declaration;
  - (iii) the term of the declaration;
- (d) the day on which any relinquishment notice is given to the chief executive by the holder and the number of blocks and sub-blocks relinquished;
- (e) a summary of the work program, including any days provided for under the program on which activities to be carried out under the permit are to be completed;
- (f) the day the work program expires;
- (g) if a GHG well is drilled under the permit—the identifying name of the well;
- (h) any provisions of the permit, other than the mandatory conditions for GHG permits.

## **3 Additional matters for a GHG lease**

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

- (a) if the lease was granted because of a call for tenders—the tender details for the call for tender;

- (b) if the lease was granted because of a permit-related application—the number of the GHG permit;
- (c) a list of the sub-blocks and the total area in square kilometres, of the lease when it was granted;
- (d) the day the development plan expires;
- (e) for a GHG coordination arrangement made by the holder and approved by the Minister—
  - (i) the day the arrangement was approved; and
  - (ii) the number of the overlapping authority to which the arrangement relates;
- (f) if a GHG coordination arrangement mentioned in paragraph (e) is cancelled by, or with the approval of, the Minister—the day the arrangement is cancelled;
- (g) if a GHG well is drilled under the lease—the identifying name of the well;
- (h) any provisions of the lease, other than the mandatory conditions for GHG leases.

## Schedule 3 Fees

section 35

### Part 1 GHG authority fees

	\$
1 Tender for GHG permit—Act, s 35(d) . . . . .	1 141.00
2 Application for approval to amend the work program for a GHG permit—Act, s 68(b) . . . . .	457.40
3 Proposed later work program given to the Minister within the time required under section 91(3) of the Act—Act, s 91(6), definition <i>relevant fee</i> . . . . .	457.40
4 Application for renewal of GHG permit—Act, s 94(1)(d)(i) . . . . .	569.00
5 Application for potential storage area declaration for a GHG permit—Act, s 101(2)(b) . . . . .	912.00
6 Permit-related application for a GHG lease—Act, s 114(d). . . . .	1 141.00
7 Application for approval to amend the development plan for a GHG lease—Act, s 157(2)(b) . . . . .	457.40
8 Proposed later development plan for GHG lease given to the Minister within the time required under section 172(3) of the Act—Act, s 172(6), definition <i>relevant fee</i> . . . . .	457.40
9 Application for surrender of GHG lease—Act, s 177(1)(b)	457.40
10 Application for approval of proposed GHG coordination arrangement—Act, s 188(2)(b)(ii) . . . . .	457.40
11 Application for GHG data acquisition authority—Act, s 234(b). . . . .	343.00



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## Part 2 General GHG authority fees payable under ch 5 of the Act

		\$
1	Fee for required information for a GHG authority made available by the chief executive—Act, s 261(1)(b)—	
	(a) for information made available in an electronic form, other than on a tape cartridge . . . . .	134.60
	(b) for information made available on a tape cartridge . . . . .	269.70
2	If a public counter is used to search and take extracts from, or obtain a copy of all or part of a notice, document or information in, the GHG register—Act, s 341(1)(b) and (c)—	
	(a) for a standard departmental public tenure enquiry report . . . . .	42.60
	(b) otherwise . . . . .	106.60
3	Notice of a dealing other than a third party transfer—Act, s 350(2). . . . .	114.00
4	Application for approval and registration of a third party transfer—Act, s 352(3)(b)(ii). . . . .	114.00

## Schedule 4 Dictionary

### section 2

**6 month period**, for part 3, division 5, see section 20.

**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.

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

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

- (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 information**, for a relinquishment or surrender report for a GHG tenure, means each of the following—

- (a) a summary of all significant hazards to future safe and efficient coal mining that, under the P&G Act, sections 690(1)(g) and 706, and the *Petroleum and Gas (Production and Safety) Regulation 2004*, are required to be reported by the person;
- (b) for each hazard mentioned in the summary under paragraph (a)—a reference to the report containing details of the hazard;

- 
- (c) for any other hazard, or potential hazard, to future safe and efficient mining created under the GHG permit to future safe and efficient mining that, under the P&G Act safety provisions, is required to be reported by the person—
- (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.

***petroleum well*** means a petroleum well under the P&G Act, schedule 2, or a well under the 1923 Act, section 2.

***rig release day***, for a GHG 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 GHG tenure holder intends no further drilling of the well to happen.

***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 work out the subsurface features by transmitting sound waves into the ground and measuring the time they take to return to the surface.

***standard departmental public tenure enquiry report***, for schedule 3, part 2, means an extract from the GHG register of particular information about a GHG tenure including, for example, details of the tenure holder and a description of the area of the tenure in blocks and sub-blocks.

***water bore*** means any of the following—

- (a) a water bore under the Water Act, schedule 4;
- (b) water observation bore or a water supply bore under the P&G Act, schedule 2.

## Endnotes

### 1 Index to endnotes

	Page
2 Date to which amendments incorporated . . . . .	42
3 Key . . . . .	42
4 Table of reprints . . . . .	43
5 List of legislation . . . . .	43
6 List of annotations . . . . .	44

### 2 Date to which amendments incorporated

This is the reprint date mentioned in the Reprints Act 1992, section 5(c). Accordingly, this reprint includes all amendments that commenced operation on or before 1 September 2012. Future amendments of the Greenhouse Gas Storage Regulation 2010 may be made in accordance with this reprint under the Reprints Act 1992, section 49.

### 3 Key

#### Key to abbreviations in list of legislation and annotations

Key	Explanation	Key	Explanation
AIA	= Acts Interpretation Act 1954	(prev)	= previously
amd	= amended	proc	= proclamation
amdt	= amendment	prov	= provision
ch	= chapter	pt	= part
def	= definition	pubd	= published
div	= division	R[X]	= Reprint No. [X]
exp	= expires/expired	RA	= Reprints Act 1992
gaz	= gazette	reloc	= relocated
hdg	= heading	renum	= renumbered
ins	= inserted	rep	= repealed
lap	= lapsed	(retro)	= retrospectively
notfd	= notified	rv	= revised edition
num	= numbered	s	= section
o in c	= order in council	sch	= schedule
om	= omitted	sdiv	= subdivision
orig	= original	SIA	= Statutory Instruments Act 1992
p	= page	SIR	= Statutory Instruments Regulation 2002
para	= paragraph	SL	= subordinate legislation
prec	= preceding	sub	= substituted
pres	= present	unnum	= unnumbered
prev	= previous		

## 4 Table of reprints

Reprints are issued for both future and past effective dates. For the most up-to-date table of reprints, see the reprint with the latest effective date.

If a reprint number includes a letter of the alphabet, the reprint was released in unauthorised, electronic form only.

Reprint No.	Amendments included	Effective	Notes
1	none	9 April 2010	
1A	2010 SL No. 298	29 October 2010	
1B	2010 SL No. 313	1 January 2011	
1C	2011 SL No. 94	1 July 2011	
1D	2011 SL No. 94	1 September 2011	
1E	2012 SL No. 105	23 July 2012	
1F	2012 SL No. 105	1 September 2012	

## 5 List of legislation

### *Regulatory impact statements*

For subordinate legislation that has a regulatory impact statement, specific reference to the statement is included in this list.

### *Explanatory notes*

All subordinate legislation made on or after 1 January 2011 has an explanatory note. For subordinate legislation made before 1 January 2011 that has an explanatory note, specific reference to the note is included in this list.

### **Greenhouse Gas Storage Regulation 2010 SL No. 58**

made by the Governor in Council on 8 April 2010

notfd gaz 9 April 2010 pp 867–8

commenced on date of notification

exp 1 September 2020 (see SIA s 54)

Note—The expiry date may have changed since this reprint was published. See the latest reprint of the SIR for any change.

amending legislation—

### **Greenhouse Gas Storage Amendment Regulation (No. 1) 2010 SL No. 298**

notfd gaz 29 October 2010 pp 591–2

commenced on date of notification

### **Greenhouse Gas Storage Amendment Regulation (No. 2) 2010 SL No. 313**

notfd gaz 19 November 2010 pp 754–5

ss 1–2 commenced on date of notification

remaining provisions commenced 1 January 2011 (see s 2)

### **Mines Legislation Amendment Regulation (No. 1) 2011 SL No. 94 pts 1, 6**

notfd gaz 17 June 2011 pp 430–4

Endnotes

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ss 1–2 commenced on date of notification  
s 15 commenced 1 September 2011 (see s 2(2))  
remaining provisions commenced 1 July 2011 (see s 2(1))

**Natural Resources and Mines Legislation Amendment Regulation (No. 1) 2012 SL**

**No. 105 ss 1, 2(1)(b), (3), pt 9**  
notfd gaz 20 July 2012 pp 863–7  
ss 1–2 commenced on date of notification  
ss 17–18, 20 commenced 23 July 2012 (see s 2(1)(b))  
remaining provisions commenced 1 September 2012 (see s 2(3))

## **6 List of annotations**

**Seismic survey report**

**s 18** amd 2010 SL No. 298 s 3

**Security for GHG authorities**

**s 32** amd 2011 SL No. 94 s 14; 2012 SL No. 105 s 18

**SCHEDULE 1—ANNUAL RENT**

sub 2010 SL No. 313 s 4; 2011 SL No. 94 s 15; 2012 SL No. 105 s 19

**SCHEDULE 3—FEES**

sub 2010 SL No. 313 s 5; 2011 SL No. 94 s 16; 2012 SL No. 105 s 20

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