

Greenhouse Gas Storage Act 2009

Greenhouse Gas Storage Regulation 2021

Current as at 27 August 2021

© State of Queensland 2021



This work is licensed under a Creative Commons Attribution 4.0 International License.



Queensland

Greenhouse Gas Storage Regulation 2021

Contents

		Page
Part 1	Preliminary	
1	Short title	3
2	Definitions	3
Part 2	Requirements for work programs and development plans	
3	Matters for proposed initial work programs	3
4	Matters for proposed initial development plans	4
5	Information for site plans for GHG stream storage sites	4
Part 3	Requirements for proposed test plans	
6	Requirements for proposed test plan for GHG storage injection tes 5	sting
Part 4	Reporting	
7	Information for relinquishment report for GHG permit	6
8	Information for end of tenure report	8
9	Information for report for a surrender application	8
Part 5	Other notices and reports	
Division 1	Preliminary	
10	Purpose of part	9
Division 2	Notices	
11	Notice about intention to drill a GHG well	10
12	Notice about particular events for GHG wells	10
13	Notice about intention to carry out seismic survey or scientific or tech survey	hnical 11
14	Notice about completion of seismic survey or scientific or technica survey	l 12
Division 3	GHG well reports	
15	Daily drilling report	12
16	Well completion report	13
17	Well abandonment report	16

Contents

Division 4	Survey reports	
18	Seismic survey report	19
19	Scientific or technical survey report	21
Division 5	GHG storage reports	
20	How particular volumes must be stated in reports	22
21	GHG storage injection testing report	22
22	GHG stream storage capacity report	23
23	GHG stream storage injection report	24
Part 6	Samples	
24	Keeping samples	25
25	Cutting samples	25
26	Core samples	26
27	Fluid samples	26
Part 7	Confidentiality periods for required information	
28	Confidentiality periods for required information for GHG authorities	27
29	Publication of required information	28
Part 8	Financial provisions	
30	Annual rent	29
31	When annual rent must be paid	29
32	Way to pay annual rent	30
33	Security for GHG authorities	30
34	Interest rate	31
35	Fees	31
Part 9	Miscellaneous	
36	Way for making application, lodging document or making submission 31	I
Part 10	Repeal and transitional provisions	
Division 1	Repeal	
37	Repeal	32
Division 2	Transitional provision	
38	Existing daily drilling reports	32
Schedule 1	Annual rent	33
Schedule 2	Fees	34
Schedule 3	Dictionary	36

Greenhouse Gas Storage Regulation 2021

Part 1 Preliminary

1 Short title

This regulation may be cited as the *Greenhouse Gas Storage Regulation 2021*.

2 Definitions

The dictionary in schedule 3 defines particular words used in this regulation.

Part 2 Requirements for work programs and development plans

3 Matters for proposed initial work programs

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

- (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 of the proposed GHG permit;
- (c) the rationale, in relation to the geological model for the area, for the activities proposed to be carried out under the proposed GHG permit.

[s 4]

4 Matters for proposed initial development plans

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

- (a) any likely conflict between an authorised activity to be carried out under the proposed GHG lease and another authorised activity carried out under an authority, however called, under another resource Act;
- (b) details, including the location, type and size, of any planned infrastructure intended to be located within the area of the proposed GHG lease.

Examples of infrastructure—

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

5 Information for site plans for GHG stream storage sites

For section 142(3) of the Act, the following information is prescribed—

- (a) details of-
 - (i) each petroleum well (a *relevant well*), other than a petroleum well mentioned in section 143 of the Act, that intersects or may intersect the site; and
 - (ii) each water bore (a *relevant bore*) that intersects or may intersect the site;
- (b) the impacts GHG stream storage may have on a relevant well or relevant bore;
- (c) how the impacts on a relevant well or relevant bore will be mitigated or prevented.

Part 3 Requirements for proposed test plans

6 Requirements for proposed test plan for GHG storage injection testing

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

- (a) where and how the proposed testing will be carried out;
- (b) details of the substance proposed to be injected, including—
 - (i) whether the substance is composed of a GHG stream or water; and
 - (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 after its injection;
- (c) the operations and techniques to be used to monitor and verify the behaviour of the substance during the proposed testing;
- (d) an assessment of whether there is any risk to public health or the environment associated with the proposed testing;
- (e) how any risks mentioned in paragraph (d) will be mitigated or prevented.

[s 7]

Part 4 Reporting

7 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 area for the permit 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 description of the geological model for 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 under the Act for the authorised activities carried out in the relinquished area;
 - (g) the hazard information for the report;
 - (h) the volume of water produced for the authorised activities carried out in the relinquished area from each GHG well or water bore in the area for each year since the GHG permit took effect;
 - (i) if a GHG well has been made in the relinquished area since the permit 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 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 the following information—

- (a) spatial information showing the location of—
 - (i) the area of the permit immediately before the relinquishment (the *previous permit area*); and
 - (ii) the relinquished area;
- (b) spatial information showing the location in the relinquished area of—
 - (i) each GHG well and water bore drilled under the permit; and
 - (ii) each seismic line used for a seismic survey carried out under the permit;
- (c) structure contour spatial information showing the seismic horizons (seismic reflectors) in the relinquished area;
- (d) spatial information 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 the following information—

- (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]

relinquished area, for a relinquishment report for a GHG permit, means the part of the area of the permit that is relinquished.

8 Information for end of tenure report

- (1) For section 256(b) of the Act, the information prescribed is any information, other than the information mentioned in section 256(a) of the Act, required for a report under—
 - (a) for a GHG permit—section 7; or
 - (b) for a GHG lease—section 9.
- (2) For subsection (1)—
 - (a) a reference in section 7 to the relinquished area is taken to be a reference to the area of the GHG permit 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 lease immediately before it ended.
- (3) Subsection (1) does not apply to the extent the information has been included in a relinquishment report or a report for a surrender application given for the tenure.

9 Information for report for a surrender application

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

- (a) information about the amount and location of—
 - (i) GHG stream storage carried out in the area of the GHG lease; and
 - (ii) water produced for an authorised activity carried out in the area of the lease from each GHG well or water bore in the area;
- (b) other information related to the information mentioned in paragraph (a) that helps to show or describe—

- (i) the size and location of any GHG stream storage sites in the area of the lease; and
- (ii) the amount and location of water that may be produced for an authorised activity carried out in the area of the lease from each GHG well or water bore in the area;
- (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 under the Act for the authorised activities carried out in the area of the lease;
- (h) any information required to be reported under the Act for the lease that has not been previously reported.

Part 5 Other notices and reports

Division 1 Preliminary

10 Purpose of part

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.

Note-

A person must comply with a requirement under this part. See section 257(4) of the Act.

[s 11]

Division 2 Notices

11 Notice about intention to drill a GHG well

- (1) If the holder of a GHG tenure intends to drill a GHG well, the holder must give the chief executive a notice about the proposed drilling of the well.
- (2) The notice must—
 - (a) be given to the chief executive in the required way at least 10 business days before the drilling starts; and
 - (b) state a proposed identifying name for the GHG well.
- (3) The proposed identifying name must not be the same, or substantially the same, as an identifying name for another well recorded in the register.

12 Notice about particular events for GHG wells

- (1) If any of the following events happens, the relevant holder must give the chief executive a notice about the event—
 - (a) drilling of a GHG well is completed;
 - (b) the completion configuration of a GHG well changes;
 - (c) a GHG well is abandoned.
- (2) For subsection (1)(a), drilling of a GHG well is completed if—
 - (a) the drilling rig last used to drill the well is moved so it is no longer above the well; and
 - (b) the relevant holder intends no further drilling of the well to occur.
- (3) For subsection (1)(b), the completion configuration of a GHG well changes if, after drilling of the well is completed—
 - (a) additional casing is installed in the well; or
 - (b) any part of the well is plugged, other than for decommissioning the well; or

- (c) an interval in the well is altered in another way.
- (4) The notice must be given to the chief executive in the required way within 10 business days after the event happens.
- (5) In this section—

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

13 Notice about intention to carry out seismic survey or scientific or technical survey

- (1) This section applies if the holder of a GHG authority intends to carry out a seismic survey or a scientific or technical survey in either of the following areas—
 - (a) the area of a GHG tenure;
 - (b) an area subject to a GHG data acquisition authority that relates to a GHG tenure.
- (2) The holder must give the chief executive a notice about the survey stating the following information—
 - (a) an identifying name 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 the surveying will start;
- (e) the expected duration of the surveying.
- (3) The identifying name for the survey must not be the same, or substantially the same, as an identifying name for another survey recorded in the register.
- (4) The notice must—
 - (a) be in the approved form; and
 - (b) be given to the chief executive in the required way at least 10 business days before the survey starts; and

[s 14]

(c) be accompanied by spatial information showing the location of the area to be surveyed.

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

- (1) This section applies if a seismic survey or a scientific or technical survey is completed in either of the following areas—
 - (a) the area of a GHG tenure;
 - (b) an area subject to a GHG data acquisition authority that relates to a GHG tenure.
- (2) The holder of the GHG authority for the area must give the chief executive a notice about the completion of the survey.
- (3) The notice must—
 - (a) be in the approved form; and
 - (b) be given to the chief executive in the required way within 10 business days after the survey is completed.
- (4) For this section, a survey is completed as soon as all of the raw data for the survey has been recorded or recovered.

Division 3 GHG well reports

15 Daily drilling report

- (1) The holder of a GHG tenure must keep a report (a *daily drilling report*) for each day on which drilling of a GHG well is carried out under the tenure.
- (2) A daily drilling report for a GHG well must contain the following information about the drilling carried out on the day to which the report relates—
 - (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 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) The holder of a GHG tenure must give the chief executive a report (a *well completion report*) about the completion of a GHG well drilled under the tenure.
- (2) The report must be given to the chief executive in the required way within 12 months after the rig release day for the well.
- (3) The report must contain the following information—
 - (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 summary of the information about the well in the report (commonly known as a 'well card');
- (e) spatial information 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 having regard 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;
- (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, including the depth in metres of the place or interval at which the testing was carried out;

- (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;
- 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;

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) If the well is plugged and abandoned on or 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 holder of a GHG tenure plugs and abandons a GHG well drilled under the tenure, the holder must give the chief executive a report (a *well abandonment report*) about the abandonment.
- (2) The report must be given to the chief executive in the required way—
 - (a) if the well is plugged or abandoned before the rig release day for the well—when the well completion report for the well is given to the chief executive under section 16; or
 - (b) otherwise—within 6 months after the completion day.
- (3) The report must contain the following information—
 - (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—
 - (i) spatial information showing its location; and
 - (ii) the day 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 (4), and the thickness of any coal seam, natural underground reservoir under the P&G Act or aquifer intersected by the well;
 - (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;
- (e) the following information about the completion or abandonment of the well—
 - 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;

Examples of features that may cause a hazard to underground mining operations—

aluminium, batteries, electronics

(iii) the surveyed location of any prescribed equipment;

[s 17]

- (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 other abandonment procedures used for the well;
- (vii) 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 help another person in making an assessment of potential risks to safe and efficient underground mining.
- (4) For subsection (3)(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—
 - (i) the total vertical depth in metres; and
 - (ii) the horizontal plane; or
 - (b) otherwise—the depth in metres.
- (5) 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) 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 holder must give the chief executive in the required way a seismic survey report for the survey within 2 years after the completion day for the survey.
- (3) The report must contain the following information—
 - (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 in 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 reprocessed;
 - (h) an evaluation of the processed or reprocessed data, including an interpretation of the seismic horizons

[s 18]

(seismic reflectors) and any leads or prospects identified from the data;

- (i) spatial information 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 spatial information showing the seismic horizons (seismic reflectors) in the area surveyed; and
 - (ii) spatial information about 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;
 - (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 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 an area of the authority; or
 - (b) reprocesses raw data obtained from a survey mentioned in paragraph (a).
- (2) The holder must give the chief executive in the required way a scientific or technical survey report for the survey within 6 months after the completion day for the survey.
- (3) The report must contain the following information—
 - (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 in the area surveyed;
 - (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) spatial information showing the location of—
 - (i) the area surveyed; and
 - (ii) where any measurements were made or samples were taken for the survey.
- (4) The report must be accompanied by each of the following in digital form—
 - (a) the raw data obtained from the survey;

[s 20]

(b) the processed or reprocessed data derived from the survey.

Division 5 GHG storage reports

20 How particular volumes must be stated in reports

If this division requires a volume of a GHG stream or water to be stated in a report, the volume must be stated as—

- (a) for a GHG stream—millions of cubic metres; or
- (b) for water—megalitres.

21 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 holder of the tenure must give the chief executive in the required way a report (a *GHG storage injection testing report*) about the GHG storage injection testing within 40 business days after the testing ends.
- (3) The report must contain the following information—
 - (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 after 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 (g) are being mitigated.

22 GHG stream storage capacity report

- (1) This section applies if there is a GHG storage reservoir in the area of a GHG tenure.
- (2) The holder of the GHG tenure must give the chief executive in the required way a report (a *GHG stream storage capacity report*) about the storage capacity of the GHG storage reservoir for each 6-month period for the tenure.
- (3) The report must be given to the chief executive within 40 business days after the end of the 6-month period.
- (4) The report must contain the following information—
 - (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 in the area of the tenure worked out on the first day and last day of the period.

[s 23]

23 GHG stream storage injection report

- (1) A holder of a GHG lease must give the chief executive in the required way a report (a *GHG stream storage injection report*) about the injection of a GHG stream or water into a GHG storage site for each 6-month period for the lease.
- (2) The report must be given to the chief executive within 40 business days after the end of the 6-month period.
- (3) The report must contain the following information—
 - (a) the number of the lease;
 - (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 in 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 storage reservoir 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 (f) or (g) are being mitigated.

Part 6 Samples

24 Keeping samples

- (1) For section 258(1) of the Act, the samples to be kept are the samples mentioned in sections 25 to 27.
- (2) A sample must be kept until the later of the following—
 - (a) the day the term of the GHG tenure ends;
 - (b) the day the sample, or part of the sample, is given to the chief executive under section 259 of the Act.
- (3) A sample must be kept in a way that prevents unnecessary deterioration or loss of the sample.

25 Cutting samples

- (1) A holder of a GHG tenure 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—
 - (a) be between 250g and 500g in weight; and
 - (b) be washed and dried; and
 - (c) be given in a labelled container suitable for long-term storage and handling that states—

- (i) the identifying name of the GHG well from which the sample was taken; and
- (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.

26 Core samples

- (1) A holder of a GHG tenure must keep each core recovered from a GHG well under the GHG tenure.
- (2) The part of the core given to the chief executive 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 labelled box or other container suitable for long-term storage and handling that states—
 - (i) the identifying name of the well from which the core was recovered; and
 - (ii) if more than 1 core is recovered from the well—the number of the core; and
 - (iii) the depth in metres of the top and bottom of the interval cored; and
 - (iv) the length in metres of the core recovered.

27 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 holder must keep the fluid sample.

[s 28]

- (3) The fluid sample given to the chief executive under section 259(1) of the Act must be given in a labelled glass bottle that is teflon-sealed with a screw-top that states—
 - (a) the identifying name of the well; and
 - (b) the depth in metres of the top and bottom of the interval from which the sample was recovered; and
 - (c) the day on which the sample was recovered; and
 - (d) the method by which the sample was recovered.

Part 7 Confidentiality periods for required information

28 Confidentiality periods for required information for GHG authorities

- (1) For section 261(1) of the Act, the confidentiality period for required information starts on the day the information is lodged and ends on the day that is—
 - (a) for a well completion report given under section 16 or a well abandonment report given under section 17—2 years after the day the report is given to the chief executive; and
 - (b) for a seismic survey report given under section 18-2 years after the day the report is given to the chief executive; and
 - (c) for a scientific or technical survey report given under section 19—2 years after the day the report is given to the chief executive; and
 - (d) for a GHG storage injection testing report given under section 21—
 - (i) for a GHG permit—2 years after the day of the injection testing; or
 - (ii) for a GHG lease—5 years after the day of the injection testing; and

[s 29]

- (e) for a GHG stream storage capacity report given under section 22—6 months after the last day of the period to which the report relates; and
- (f) for a GHG stream storage injection report given under section 23 for a GHG lease—6 months after the last day of the period to which the report relates; and
- (g) for a cutting sample, core sample or fluid sample given under section 259 of the Act—2 years after the day of the giving of the sample or core.
- (2) However, there is no confidentiality period for a well abandonment report if—
 - (a) the report is to be made available to a person under section 261(1)(b) of the Act; and
 - (b) the person is the holder of a coal or oil shale mining tenement under the Mineral Resources Act; and
 - (c) the GHG well was drilled in the area of the person's tenement mentioned in paragraph (b).
- (3) Also, there is no confidentiality period for required information not mentioned in subsection (1).

29 Publication of required information

For section 261(1)(a) of the Act, the chief executive may publish required information in the following ways—

- (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 or in other spatial information 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 the information 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 the information to another person or presenting it to the person in a visual form.

Part 8 Financial provisions

30 Annual rent

- (1) For sections 86(1), 168(1) and 243(1) of the Act, the annual rent payable for a GHG authority is stated in schedule 1.
- (2) If the period to which the annual rent relates is less than a year, a pro-rata amount of the rent is payable for the year.
- (3) If the annual rent for a GHG authority is paid for a year and the authority ends during the year, the proportion of the annual rent for the remainder of the year may be refunded.

31 When annual rent must be paid

- (1) For sections 86(2), 168(2) and 243(2) of the Act, the annual rent for a GHG authority must be paid on or before 31 August each year.
- (2) However, on the grant of the authority, the annual rent must be paid within 20 business days after the authority takes effect.
- (3) Subsection (2) does not apply on the grant of the authority if the Minister has already required payment of the annual rent.

Note-

See the Act, sections 39(1), 96(5), 129(1) and 235(3) for when the Minister may have already required payment of annual rent for the authority.

[s 32]

32 Way to pay annual rent

For sections 86(2), 168(2) and 243(2) of the Act, the annual rent must be paid by cash or electronic transfer of funds.

33 Security for GHG authorities

- (1) For section 271(2)(a) of the Act, the following forms of security are prescribed—
 - (a) cash;
 - (b) electronic transfer of funds;
 - (c) 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 day; and
 - (iii) states the type and number of the GHG authority or proposed GHG 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;
 - (d) a combination of the forms mentioned in paragraphs (a) to (c).
- (2) For section 271(2)(b) of the Act, the following amounts are prescribed—
 - (a) for a GHG permit or proposed GHG permit—\$16,350.00;
 - (b) for a GHG lease or proposed GHG lease—\$47,690.00;
 - (c) for a GHG data acquisition authority or proposed GHG data acquisition authority—\$14,305.00.

34 Interest rate

For section 372(2) of the Act, the rate of interest is 15% a year.

35 Fees

The fees payable under the Act are stated in schedule 2.

Part 9 Miscellaneous

36 Way for making application, lodging document or making submission

- (1) For section 411(2)(b) of the Act, the prescribed way for making or giving an application, document or submission is electronically using the online system on the department's website.
- (2) Also, the chief executive may, by notice given to the person, require the person to give a hard copy of the application, submission or document at a place mentioned in section 411(2)(a) of the Act.
- (3) If a person makes or gives an application, submission or document electronically after 4.30p.m. on a working day and before 8.30a.m. on the next working day (the *later day*), the person is taken to have made or given the application, submission or document at 8.30a.m. on the later day.

[s 37]

Part 10 Repeal and transitional provisions

Division 1 Repeal

37 Repeal

The Greenhouse Gas Storage Regulation 2010, SL No. 58 is repealed.

Division 2 Transitional provision

38 Existing daily drilling reports

For section 16(3)(h), a daily drilling report for a well includes a daily drilling report under the repealed *Greenhouse Gas Storage Regulation 2010*, section 15.

Schedule 1 Annual rent

section 30(1)

		\$
1	Annual rent for GHG permit (Act, s 86(1))—for each sub-block included in the area of the permit	2.95
2	Annual rent for GHG lease (Act, s 168(1))—for each square kilometre or part of a square kilometre of the area for the lease	162.00
3	Annual rent for GHG data acquisition authority (Act, s $243(1)$)—for each sub-block included in the area of the	
	authority	2.95

Schedule 2 Fees

section 35

Part 1 GHG authority fees

	\$
Tender for GHG permit (Act, s 35(d))	1,456.00
Application for approval to amend the work program for a GHG permit (Act, s 68(b))	584.00
Giving proposed later work program to the Minister within the time required under section $91(3)$ of the Act (Act, s $91(6)$, definition <i>relevant fee</i> , paragraph (a))	584.00
Application for renewal of GHG permit (Act, s 94(1)(d)(i))	726.00
Application for a declaration that all or a stated part of the area of a GHG permit is a potential storage area for the permit (Act, s $101(2)(b)$)	1,164.00
Permit-related application for a GHG lease (Act, s 114(d))	1,456.00
Application for approval to amend the development plan for a GHG lease (Act, s $157(2)(b)$)	584.00
Giving proposed later development plan for GHG lease to the Minister within the time required under section 172(3) of the Act (Act, s 172(6), definition <i>relevant fee</i> , paragraph (a))	584.00
Surrender application for a GHG lease (Act, s 177(1)(b))	584.00
Application for approval of proposed GHG coordination arrangement (Act, s 188(2)(b)(ii))	584.00
Application for GHG data acquisition authority (Act, s 234(b))	438.40
	Application for approval to amend the work program for a GHG permit (Act, s 68(b)) Giving proposed later work program to the Minister within the time required under section 91(3) of the Act (Act, s 91(6), definition <i>relevant fee</i> , paragraph (a)) Application for renewal of GHG permit (Act, s 94(1)(d)(i)) Application for a declaration that all or a stated part of the area of a GHG permit is a potential storage area for the permit (Act, s 101(2)(b)) Permit-related application for a GHG lease (Act, s 114(d)) Application for approval to amend the development plan for a GHG lease (Act, s 157(2)(b)) Giving proposed later development plan for GHG lease to the Minister within the time required under section 172(3) of the Act (Act, s 172(6), definition <i>relevant fee</i> , paragraph (a)) Surrender application for a GHG lease (Act, s 177(1)(b)) Application for approval of proposed GHG coordination arrangement (Act, s 188(2)(b)(ii))

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

		\$
	for required information for a GHG authority made lable by the chief executive (Act, s 261(1)(b))—	
(a)	for information made available in electronic form, other than on a tape, cartridge or other information storage media	171.90
(b)	for information made available on a tape, cartridge or other information storage media	344.60

1

Schedule 3 Dictionary

section 2

6-month period, for part 5, division 5, 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.

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.

daily drilling report see section 15.

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

GHG storage injection testing report see section 21. GHG stream storage capacity report see section 22.

GHG stream storage injection report see section 23.

hazard means a thing or situation with potential to cause harm to a person, property or the environment.

hazard information, for a GHG tenure, means the following information for a hazard relating to activities carried out under the GHG tenure—

- (a) the nature of the hazard;
- (b) the cause, or reasons for existence, of the hazard;
- (c) the location of the hazard;
- (d) measures taken to prevent or reduce the risk of the hazard to mitigate the effects of the hazard.

identifying name—

- (a) for a GHG well, means the unique identifying name and number for the well recorded in the register; or
- (b) for a seismic survey or scientific or technical survey, means the unique identifying name or number for the survey recorded in the register.

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.

water bore means-

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

well abandonment report see section 17.well completion report see section 16.